

Environmental Protection Division

P.O. Box 1663, MS J978 Los Alamos, New Mexico 87545 505-667-2211/Fax 505-665-8858

Date: August 3, 2007 *Refer To:* ENV-DO-07-016

Ms. Debra McElroy
Section Chief – Enforcement/Compliance
New Mexico Environment Department
Air Quality Bureau
2048 Galisteo St.
Santa Fe, New Mexico 87505

SUBJECT: SEMI-ANNUAL MONITORING REPORT FOR JANUARY – JUNE 2007 AIR QUALITY TITLE V OPERATING PERMIT P100-M1 IDEA ID NO. 856 – LOS ALAMOS NATIONAL LABORATORY

Dear Ms. McElroy:

Enclosed is a copy of Los Alamos National Laboratory's Title V Operating Permit semi-annual Monitoring Report for the period **January 1 – June 30, 2007** (Enclosure - 1). This submission is required by permit condition 4.2 of NMED Operating Permit P100-M1 dated June 15, 2006, and is transmitted within the allowed 45 days after the end of the reporting period as specified in permit condition 4.3. Included with this report are attachments A through I. Each attachment is labeled with its contents and provides monitoring data to support compliance with conditions listed in the monitoring sections of the permit.

One deviation was identified in this report. On May 1, 2007, the Power Plant exceeded the 20% opacity limit as listed in Permit Condition 2.9.4.10. Verbal notification was made to NMED on May 2, 2007, and a written notification was provided to your bureau in a letter dated May 9, 2007. The ten (10) minute average opacity observed during the observation was 25%.

If you have any questions or comments regarding this submittal or would like to discuss the submittal in greater detail, please contact Steve Story at 665-2169 or David Paulson at 665-8884.

Sincerely,

Victoria A. George

Division Leader

Environmental Protection Division

Manne Williams Wilburn

DLP:tav

Enc: a/s

Cy: w/o opacity reports

M. Mallory, PADOPS, A102

R. Watkins, ADESH&Q, K491

S. Fong, DOE-LA-SO, A316

P. Wardwell, LC-ESH, A187

D. Wilburn, ENV-EAQ, J978

S. Story, ENV-EAQ, J978

D. Paulson, ENV-EAQ, J978

J. Stanton, SSS-AE-V02, A199

Cy: with opacity reports

ENV-DO file IRM-RMMSO, A150 ENV-EAQ Title V Monitoring Report File

LA-UR-07-5289

Approved for public release; distribution is unlimited.

Title:

Semi-Annual Monitoring Report January 1 - June 30, 2007

Air Quality Title V Operating Permit P100M1

Los Alamos National Laboratory

Author(s):

David Paulson, ENV-EAQ

Intended for:

Ms. Debra McElroy

Section Chief, Enforcement/Compliance New Mexico Environment Department

Air Quality Bureau 2048 Galisteo St.

Santa Fe. New Mexico 87505



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Form 836 (7/06)

2.5

Identifying Information	
Source Name: Los Alamos National Laboratory	County: Los Alamos .
Source Address: City: Los Alamos	State: <u>NM</u> Zip Code: <u>87545</u>
Responsible Official: Victoria A. George Technical Contact: Steven L. Story	Ph No. (505) 667-2211 Fax No. (505) 665-8858 Ph No. (505) 665-2169 Fax No. (505) 665-8858
Principal Company Product or Business: National Security and Natio	uclear Weapons Research Primary SIC Code: 9711
Permit No. P100M1 {IDEA/Tempo ID No. 856}	Permit Issued Date: April 30, 2004 M1 June 15, 2006
Certification of Truth, Accuracy, and Compl	leteness
I, Victoria A. George certify that, based on information statements and information contained in the attached semi-annual Signature William Wilking William Title: Division Leader, Environmental Protection Division .	monitoring report are true, accurate, and complete.

Sources (by permit section)

- 1. Asphalt Production
- 2. Beryllium Activities
- 3. Boilers and Heaters
- 4. Carpenter Shops, TA-3-38 & TA-15-563
- 5. Chemical Usage
- 6. Degreasers
- 7. Internal Combustion Sources
- 8. Data Disintegrator, TA-52-11
- 9. Power Plant at Technical Area 3 (TA-3-22)

Deviations

Attachments

- A: Asphalt Plant Opacity Reports
- **B:** Beryllium HEPA Filter Tests Results
- C: Boilers and Heaters Natural Gas Usage
- D: Carpenter Shop Hours of Operation
- E: Degreaser Solvent Usage
- F: Internal Combustion Generator Hours of Operation
- G: Data Disintegrator Box Throughput
- H: Power Plant Natural Gas and Fuel Oil Usage
- I: Power Plant Opacity Reports

1. Asphalt Production

Permit Section	Monitoring Required	Monitoring Performed
2.1.4.1	Perform monthly six (6) minute opacity readings for each emission point having opacity greater than zero as determined by EPA Method 22.	Monthly opacity reports are provided as Attachment A. Monthly six minute opacity readings are taken using the required EPA Methods.
2.1.4.2	Monitor the differential pressure (inches of water) across the baghouse by the use of a differential pressure gauge, in accordance with condition IV.C.2 of NSR permit number GCP-3-2195G.	A differential pressure gauge is in place to continuously monitor the differential pressure across the baghouse as required by NSR permit GCP-3-2195G condition IV.C.2. The differential pressure is recorded twice each day during operations, once at the beginning of the production run and once at the end. This is consistent with NSR permit GCP-3-2195G condition IV.D.2(e). Records are available on-site for NMED inspection.
2.1.4.3	40 CFR Part 60, Appendix A, Method 9 shall be used to determine compliance with the opacity limitation.	LANL has certified opacity readers on-site who perform opacity readings using 40 CFR 60, Appendix A, Method 9 to determine compliance with the opacity limitation.

2. Beryllium Activities (Permit Section 2.2.4)

Source	Monitoring Required	Monitoring Performed
TA-3-29 Chemistry and Metallurgy Research Facility	A log shall be maintained during operations which indicate the number of Be samples processed.	The registration for this source has been cancelled. Beryllium work is no longer performed at this location. A letter was sent to NMED on June 5, 2007 making this request. A log with the number of Be samples processed during this six month reporting period is available on-site for NMED inspection.
TA-3-66 Sigma Facility	A log shall be maintained during operations which show the number of metallographic specimens used in the polishing operation and the weight of Be samples processed in the electroplating/chemical milling, machining, and arc melting/casting operations.	A log is maintained showing the number of metallographic specimens used in the polishing operation. Logs are maintained showing the weight of Be samples processed in the electroplating/chemical milling, machining, and arc melting/casting operations. Logs are available on-site for NMED inspection.
TA-3-141 Beryllium Technology Facility (BTF)	Facility exhaust stack will be equipped with a continuous emission monitor used to measure beryllium emissions.	The BTF is equipped with a continuous emissions monitor to measure beryllium emissions. The monitoring system is operated in accordance with LANL Quality Assurance Project Plan ESH-17-BM and emission results are provided to NMED quarterly. Submissions for this period were provided to NMED in reports dated January 29, 2007 [ENV-EAQ:07-017] and May 8, 2007 [ENV-EAQ:07-017] and May 8, 2007 [ENV-EAQ:07-085]
Canada de la Canad	Cartridge and HEPA filters will be	Cartridge and HEPA filters are

Source	Monitoring Required	Monitoring Performed
	equipped with differential pressure gauges that measure the differential pressure across the cartridge and HEPA filters while the exhaust fans are in operation.	equipped with differential pressure gauges that measure the differential pressure across the cartridge and HEPA filters while the exhaust fans are in operation.
TA-16-207	Project files shall be maintained of components prepared for testing.	Project files are maintained of components prepared for testing. Files are available on-site for NMED inspection.
TA-35-87	A log shall be maintained during operations which show the number of beryllium filters cut.	A log is maintained showing the number of beryllium filters cut. The log is available on-site for NMED inspection.
TA-35-213 Target Fabrication Facility	Records of the stack emission test results (see Condition 2 of NSR Permit No. 632) and other data needed to determine total emissions shall be retained at the source and made available for inspection by the Department.	Records of stack emission test results are maintained on-site and available for NMED inspection. Stack emission test results are used to determine total emissions from this facility.
TA-55-PF-4 Plutonium Facility	The HEPA filtration systems shall be equipped with a differential pressure gauge that measures the differential pressure (inches of water) across the HEPA filters while the exhaust fans are in operation.	The HEPA filtration systems are equipped with differential pressure gauges that measure the differential pressure across the HEPA filters while the exhaust fans are in operation.
	Control efficiency shall be verified by daily HEPA filter pressure drop tests and annual HEPA filter challenge tests of accessible filters.	Control efficiency is verified by daily HEPA filter pressure drop readings. Readings are recorded in the TA-55 Operations Center.
		Annual HEPA filter challenge tests of accessible filters are performed. Test results are summarized in Attachment B.

3. Boilers and Heaters

Permit Section	Monitoring Required	Monitoring Performed
2.3.4.1	Emission units TA-21-357-1, TA-21-357-2, and TA-21-357-3: A volumetric flow meter shall be utilized to measure the total amount of natural gas being used on a monthly basis.	A volumetric flow meter is utilized to measure the total amount of natural gas being used on a monthly basis for emission units TA-21-357-1, TA-21-357-2 and TA-21-357-3. Natural gas usage is summarized in Attachment C.
2.3.4.2	Emission units TA-55-6-BHW-1 and TA-55-6-BHW-2: A volumetric flow meter shall be utilized to measure the total amount of natural gas being used on a monthly basis.	Volumetric flow meters are utilized to measure the total amount of natural gas being used on a monthly basis for emission units TA-55-6-BHW-1 and TA-55-6-BHW-2. Natural gas usage is summarized in
		Attachment C.
2.3.4.3	40 CFR Part 60, Appendix A, Method 9 shall be used to determine compliance with the opacity limitation.	LANL uses 40 CFR Part 60, Appendix A, Method 9 to determine compliance with the opacity limitation.

4. Carpenter Shops, TA-3-38 & TA-15-563

Permit Section	Monitoring Required	Monitoring Performed
2.4.4.1	The permittee shall maintain logs of the hours the carpenter shops are in operation.	A log is maintained of the hours of operation at the TA-3-38 shop. During this reporting period, hour meters for the cyclone separators were utilized to monitor hours of shop operation. Readings are collected and recorded monthly. The TA-15-563 carpenter shop is equipped with an hour meter on the cyclone separator. The hour meter is read and recorded monthly. Hours of operation are provided in Attachment D.

5. Chemical Usage

Permit Section	Monitoring Required	Monitoring Performed
2.5.4.1	Maintain records of chemical purchasing through facility-wide chemical tracking system, and use the data to calculate the emissions on a semi-annual basis in accordance with Condition 4.1.	Records are maintained in LANL's facility wide chemical tracking system (ChemLog). The data is used to calculate emissions and is submitted in the Semi-Annual Emission Report.

6. Degreasers

Permit Section	Monitoring Required	Monitoring Performed
2.6.4.1	Record the amount of solvent added to the degreaser, and calculate the emissions on a semi-annual basis in accordance with Condition 4.1.	Records are maintained of the amount of solvent added to the degreaser. This data is used to calculate emissions on a semi-annual basis. LANL's "Historical Solvent Usage
		Data" report for Jan. 1 – June. 30, 2007 is provided in Attachment E.
2.6.4.2	Complete checklist for work practice standards.	LANL completes work practice checklists for the degreaser operation. The checklists are available on-site for NMED inspection.

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7. Internal Combustion Sources

Permit Section	Monitoring Required	Monitoring Performed
2.7.4 [Stationary Standby Generators]	Track and record hours of operation for stationary standby generators on a semi-annual basis.	LANL tracks and records generator hours of operation on a semi-annual basis. Stationary generator hours of operation for this reporting period are provided in Attachment F.
2.7.4 [TA-33-G-1]	Track hourly and 12-month rolling total kWh. Record hours of operation and the time operation begins and ends each day.	On May 18, 2006, LANL started the TA-33 diesel generator. Other than the start up test, the generator has not run. A form has been created and will be used for tracking generator start and stop times as well as hours of operation. These hourly readings will be used in tracking the 12-month rolling total of kWh.
2.7.4.1	40 CFR Part 60, Appendix A, Method 9 shall be used to determine compliance with the opacity limitation.	LANL uses 40 CFR Part 60, Appendix A, Method 9 to determine compliance with the opacity limitation.

8. Data Disintegrator, TA-52-11

Permit Section	Monitoring Required	Monitoring Performed
2.8.4.1	The permittee shall maintain a log of the number of boxes of media that are destroyed and calculate the emissions on a semi-annual basis in accordance with Condition 4.1.	LANL maintains a log of the number of boxes of media that are shredded and calculates the emissions on a semi-annual basis. The actual number of boxes
		shredded is included in Attachment G.
2.8.4.2	The permittee shall perform regular maintenance and repair on the cyclone and cloth tube filter(s) per manufacturer's recommendations.	LANL maintains a log documenting all maintenance and repairs performed on the cyclone and cloth tube filters. The Data Disintegrator and associated pollution control devices are maintained under a preventative maintenance contract.

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9. Power Plant at Technical Area 3 (TA-3-22)

Permit	Monitoring Required	Monitoring Performed
Section		
2.9.4.1	Total fuel oil consumption shall be monitored so that combined fuel oil usage of Units TA-3-22-1, TA-3-22-2 and TA-3-22-3 can be calculated on a rolling 365-day total.	Total fuel oil consumption is monitored on a daily basis. These daily readings are used to calculate a 365-day rolling total. Attachment H contains a summary of monthly fuel oil consumption. Records of daily fuel oil use are available on-site for NMED inspection.
2.9.4.2	Natural gas consumption shall be monitored so that combined natural gas usage of Units TA-3-22-1, TA-3-22-2 and TA-3-22-3 can be calculated on a rolling 365-day total.	A volumetric flow meter is used to measure the total amount of natural gas used on a daily basis. These daily readings are used to calculate a 365-day rolling total. Attachment H contains a summary of monthly natural gas usage. Daily totals are available on-site for NMED inspection.
2.9.4.3	Natural gas consumption shall be monitored so that natural gas usage for Unit TA-3-22 CT-1 can be calculated on a rolling 365-day total.	The Combustion Turbine has not started operations. No monitoring performed.
2.9.4.4	A certification of total sulfur content of the No. 2 fuel oil used by Units TA-3-22-1, TA-3-22-2 and TA-3-22-3 shall be obtained from the supplier whenever No. 2 fuel oil is delivered to the facility.	No fuel oil was purchased or delivered during this reporting period.
2.9.4.5	If the certification as specified by Condition 2.9.4.4 is not available at delivery, the permittee shall analyze the No. 2 fuel oil to determine the total sulfur content. The analysis shall be	No fuel oil was purchased or delivered during this reporting period.

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Permit	Monitoring Required	Monitoring Performed
Section		
	conducted using Department approved methods and standards for determining total sulfur content of No. 2 fuel oil.	
2.9.4.6	The operating load of Unit TA-3-22 CT-1 specified by Condition 2.9.3.7 shall be monitored and recorded hourly during normal operations of that unit. Periods of startup and shutdown shall not be included in the hourly monitoring but shall be recorded separately.	The Combustion Turbine has not started operations. No monitoring performed.
2.9.4.7	Compliance with NOx pound per hour emission limits for Unit TA-3-22 CT-1 shall be determined by multiplying the daily total natural gas firing rate for the unit (expressed in thousands of SCF), as recorded pursuant to Condition 2.9.5.3, by the manufacturer's guaranteed emission rate of 0.1029 pounds NOx per thousand SCF of gas burned (applicable for worst-case conditions of negative 18 degrees Fahrenheit) and divided by the number of hours of operation of the unit during that day as recorded pursuant to Condition 2.9.3.8. Compliance with NOx annual emission limits for Unit TA-3-22 CT-1 shall be determined by multiplying the 365 day total natural gas firing rate for the unit (expressed in thousands of SCF), as recorded pursuant to Condition 2.9.5.3, by the manufacturer's guaranteed emission rate of 0.1029 pounds NOx per thousand SCF of gas burned (applicable for annual average conditions of 47.9 degrees Fahrenheit).	The Combustion Turbine has not started operations. No monitoring performed.

Permit	Monitoring Required	Monitoring Performed
2.9.4.8	Compliance with CO pound per hour emission limits for Unit TA-3-22 CT-1 shall be determined by multiplying the daily total natural gas firing rate for the unit (expressed in thousands of SCF), as recorded pursuant to Condition 2.9.5.3, by the manufacturer's guaranteed emission rate of 0.731 pounds CO per thousand SCF of gas burned (applicable for worst-case conditions of negative 18 degrees Fahrenheit), and divided by the number of hours of operation of the unit during that day as recorded pursuant to Condition 2.9.3.8). Compliance with CO annual emission limits for Unit TA-3-22 CT-1 shall be determined by multiplying the 365 day total natural gas firing rate for the unit (expressed in thousands of SCF), as recorded pursuant to Condition 2.9.5.3, by the manufacturer's guaranteed emission rate of 0.0613 pounds CO per thousand SCF of gas burned (applicable for annual average conditions of 47.9 degrees Fahrenheit).	The Combustion Turbine has not started operations. No monitoring performed.
2.9.4.9	At least once each calendar quarter the permittee shall use the method specified in Conditions 2.9.4.7 and 2.9.4.8 to determine compliance of Unit TA-3-22 CT-1 with the hourly and annual emission limits specified in this permit.	The Combustion Turbine has not started operations. No monitoring performed.
2.9.4.10	Visible emissions from stationary combustion equipment shall not equal or exceed an opacity of 20%. Use of pipeline quality natural gas fuel as defined in Conditions 2.9.3.1 and 2.9.3.4 constitutes compliance with	LANL uses 40 CFR Part 60, Appendix A, Method 9 to determine compliance with the opacity limitation.

Permit Section	Monitoring Required	Monitoring Performed
	20.2.61 NMAC unless opacity exceeds 20%. At such time as No. 2 fuel oil as defined in Condition 2.9.3.1 is used, opacity shall be measured in accordance with the procedures at 40 CFR 60, Appendix A, Method 9. Opacity measurements shall continue on a quarterly basis per calendar year for each effected unit until such time as pipeline quality natural gas is used.	Delivery of pipeline quality natural gas is specified in the contract with the supplier (PNM). Opacity measurements performed at the TA-03 Power Plant are provided in Attachment I.
2.9.4.11	Initial compliance tests are required on Unit TA-3-22 CT-1 for NOx and CO. These tests shall be conducted within sixty (60) days after the unit achieves the maximum normal production. If the maximum normal production rate does not occur within one hundred twenty (120) days of source startup, then the tests must be conducted no later than one hundred eighty (180) days after initial startup of the source. The tests shall be conducted in accordance with EPA Reference Methods 1 through 4, Method 7E for NOx, and Method 10 for CO contained in CFR Title 40, Part 60, Appendix A, and with the requirements of Subpart A, General Provisions, 60.8(f). Alternative test method(s) may be used if the Department approves the change. The permittee shall submit a testing protocol to the Department at least thirty (30) days prior to the test date, and provide notification to the Department at least thirty (30) days prior to the test date.	The Combustion Turbine has not started operations. No monitoring performed.
2.9.4.12	The permittee shall comply with fuel sulfur monitoring requirements at 40 CFR 60.334(h) applicable to Unit TA-	The Combustion Turbine has not started operations. No Monitoring performed.

Permit Section	Monitoring Required	Monitoring Performed
	3-22 CT-1 by making the required demonstration which shows the fuel combusted in the turbine meets the definition of natural gas at 40 CFR 60.331(u).	

Deviations

Permit Section 4.2 requires that all instances of deviations from permit conditions, including emergencies, be clearly identified. Listed below are permit deviations this period:

1. On May 1, 2007, from 9:58am to 10:08am, the LANL Power Plant experienced an excess emission with an observed average opacity of 25%. This is a deviation from Operating Permit Condition 2.9.4.10, which states that visible emissions shall not equal or exceed 20% opacity. The excess emission occurred during a boiler startup exercise using fuel oil. During the startup exercise, operational problems were encountered and the unit was brought down quickly to minimize visible emissions. The startup exercise is performed weekly to verify readiness of the system should the commercial natural gas supply be interrupted. These periodic fuel oil startup exercises usually result in only minor opacity readings.

	Last	Entry	
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Attachment A Asphalt Plant Opacity Reports

Summary Table, Reports Attached

	Source	Date	Time	Average Opacity*
Jan	Top of Shaker	01/16/07	10:32 am	0
.,	Baghouse Stack	01/16/07	10:38 am	0
	Conveyor Belt	01/16/07	10:45 am	0
Feb	Top of Shaker	02/08/07	12:50 pm	0
Mar	Top of Shaker	03/05/07	9:51 am	0
Apr	Top of Shaker	04/11/07	12:01 pm	0
May	Top of Shaker	05/08/07	8:27 am	0
June**	Entire Plant	06/20/07	1:01 pm	0

^{*} Average opacity for the Asphalt Plant is the sum of the highest consecutive 24 readings divided by 24 (6 minutes of readings). The method is in accordance with 20.2.61 NMAC and condition 2.1.4.1 of the Los Alamos National Laboratory (LANL) Operating Permit P100M1.

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^{**} EPA Method 9 was used for all readings except June. In June LANL began using EPA Method 22 to determine if any visible emissions greater than zero were present at the plant. If any emissions are observed using Method 22, a Method 9 observation will be performed on those points. Use of Method 22 is in accordance with condition 2.1.4.1 of the Los Alamos National Laboratory (LANL) Operating Permit P100M1.

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Los Alamos

LOS ALAMOS NATIONAL LABORATORY (LANL) VISIBLE EMISSION OBSERVATION FORM (6 MINUTE)

LANL Asphalt Plant Source Location: TA-60 (Sigma Mcsa) Type of Source Asphalt Plant Baghouse Possible Emission Point (Top of stack etc.) Type of Source Asphalt Plant Describe Emission Point (Top of stack etc.) Type of Source Asphalt Plant Describe Emission Point (Top of stack etc.) Type of Source Asphalt Plant Describe Emission Point (Top of stack etc.) Type of Source Type of Mark CR Height Above Grand Level Type of Conneol Equipment Type of Conneol	Source Name:	a s ma	Observation Da			Start		End Time
TA-60 (Sigma Mesa) Type of Source Asphalt Plant Describe Emission Point (Top of sack, etc.) Top OF SHAKER English Above Ground Level Feet 40 Feet Distunce from Observer LANL A	Asphalt Plant		$\frac{Q}{L}$		1	SIAM	1 9/35 / AM	
Type of Source Asphalt Plant Baghouse St C C C C C C C C C		Sioma Mesa)		0	15	30	45	Comments
Asphalt Plant Describt Emission Point (Top of Stack, etc.) TOP OF SHAKER TOP OF SHAKER Height Above Ground Level 4.5 Feet Distance From Observer 4.5 Feet Distance From Observer 5.5 Feet Distance Prom Observer 5.5 C O O O Description of Plumre (stack ext only) Distance Prom Observer 5.5 C O O O Description of Plumre (stack ext only) Distance Prom Observer 5.5 C O O O Description of Plumre (stack ext only) Distance Prom Observer 5.5 C O O O Description of Plumre (stack ext only) Distance Prom Observer 5.5 C O O O Description of Plumre (stack ext only) Distance Prom Observer 5.5 C O O O Description of Plumre (stack ext only) Distance Prom Observer 5.5 C O O O Description of Plumre (stack ext only) Distance Prom Observer 5.5 C O O O Description of Plumre (stack ext only) 5.6 O O O Description of Plumre (stack ext only) Distance Prom Observer 5.5 C O O O Description of Plumre (stack ext only) 5.6 O O O Description of Plumre (stack ext only) 5.6 O O O Description of Plumre (stack ext only) 5.6 O O O Description of Plumre (stack ext only) 5.6 O O O Description of Plumre (stack ext only) 5.6 O O O Description of Plumre (stack ext only) 5.6 O O O Description of Plumre (stack ext only) 5.6 O O O Description of Plumre (stack ext only) 5.6 O O O Description of Plumre (stack ext only) 5.6 O O O Description of Plumre (stack ext only) 5.6 O O O Description of Plumre (stack ext only) 5.6 O O O Description of Plumre (stack ext only) 5.6 O O O Description of Plumre (stack ext only) 5.6 O O O Description of Plumre (stack ext only) 5.6 O O O Description of Plumre (stack ext only) 5.6 O O O Description of Plumre (stack ext only) 5.6 O O O Description of Plumre (stack ext only) 5.6 O O O Description of Plumre (stack ext only) 5.6 O O O Description of Plumre (stack ext only) 5.6 O O O Description of Plumre (stack ext only) 5.7 O O O Description of Plumre (stack ext only) 5.6 O O O Description of Plumre (stack ext only) 5.7 O O O O Description of Plumre (Type of Control Equipment		77	77	,	~	
Describe Emission Point (Top of stack etc.) Height Above Crownal Level Heigh Relative to Observer 45 Feet Descince From Observer 50 Feet Describe From Observer Description of Plane (stack exit only) Description of Plane (stack exit only) Description of Plane (stack exit only) Description of Plane (stack exit only) Description of Plane (stack exit only) Description of Plane (stack exit only) Description of Plane (stack exit only) Description of Plane (stack exit only) Description of Plane (stack exit only) Description of Plane (stack exit only) Description of Plane Present Describe Postent? BNo DYES ITYES, droplet plane is Glatuched Describe Background (i.e. blue sky, trees, etc.) Poster of Background (i.e. blue sky, trees, etc.) TRUE SKY Reckground (i.e. blue sky, trees, etc.) Poster of Background (i.e. blue sky, trees, etc.) TRUE SKY Reckground Color Wind Speed Wind Speed Wind Speed Wind Speed (grovide from/to, i.e. from North to Soath) OTO North Stack Applor 45 F Relative Hamidity Applor 45			II .			1		
Height Above Ground Level Height Relative to Observer 45 Feet	Describe Emission Point (Top of st	tack, etc.)	,52 ²	0	0	0	0	
Distance From Observer Feet Distance From Observer Feet Description of Plume (stack exit cut) Description of Plume (stack exit cut) Description of Plume (stack exit cut) Description of Plume (stack exit cut) Description of Plume (stack exit cut) Description of Plume (stack exit cut) Description of Plume (stack exit cut) Description of Plume (stack exit cut) NO Emission Description of Plume (stack exit cut) No Emission Description of Plume (special exit cut) Description of Plume (stack exit cut) Description of Plume (special exit cut) Description of Plume (special form) of (special	TOP OF SE	HAKER	_{= 7} 3	0	0	17	0	
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Description of Plume (stack ext only) Defining De			,	<u>C</u>	0	0	0	
Clothing Clothing			566		0	0	0	
Emission Color NO EMISSION Continuous The proper present Continuous The proper present Continuous The proper present Continuous The proper present Continuous The proper present Color The proper	□Lofting □Trapping □Loopir	ng □Fanning □Coning	1 I					
Water Droplets Present? STARCE Described STARCE SOURCE	Emission Color Plume Ty	pe No Plume Present tous Fugitive Intermittent	8					
At what point in the plume was opacity determined? APPROX I TOW ATOM SOURCE Describe Background (i.e. blue sky, rees, etc.) TOW SKY Background (i.e. blue sky, rees, etc.) TOW SKY Background (i.e. blue sky, rees, etc.) TOW SKY Background (i.e. blue sky, rees, etc.) TOW SKY Background (i.e. blue sky, rees, etc.) TOW SKY Background (i.e. blue sky, rees, etc.) TOW SKY Background (i.e. blue sky, rees, etc.) TOW SKY Background (i.e. blue sky, rees, etc.) TOW SKY Wind Direction TOW Sky Conditions TOW Sky Conditions TOW Sky Conditions TOW Sky Conditions 11 12 13 14 15 15 16 17 Additional Comments/Information: NO Emission Source OBSCRUCE) TROM ANY EMISSIONS WERE OBSCRUCE) TOWN AND IN TOWN IN North Direction Point Wind Stack Wind SOURCE LAYOUT SKETCH Draw Arrow in North Direction Point North Direction Point North Direction Dobserver (please print) Name: Title: KKHARID OSTA Signature Date 3-5-07 Observer Organization K SC Certification Date ETA 2-28-07	Water Dronlets Present?	Thursday Charles	9					
Describe Background (i.e. blue sky, trees, etc.) The Control of Sky Background Color The Color of Sky Wind Direction The Color of Sky Ambient Temperature Apport 45	†		10					4
Background Color Reduct Wind Speed Wind Speed Mph Wind Speed Mph Wind Direction (provide from/to, i.e. from North to South) NNE TO SS W Ambient Temperature APTOY 45 "F Relative Humidity APTOY 45 "F Relative Humidit	At what point in the plante was ope	OUE SOURCE	11					
Background Color CLGTR Wind Speed Wind Direction TO SW Wind Speed Mph WNE TO SSW Ambient Temperature APPOY 45 F Auditional Comments/Information: NO EMISSIONS WERE OBSERVED Stack with Plume Sun Point Wind A Wind Direction Point Wind Dirk. OBSERVER (please print) Name: Title: MEANNER OSTA Signature Date OBSERVER'S POSITION OBSERVER (organization KSU Certified by Certification Date CTA Certified by Certification Date CTA Certified by Certification Date CTA Certification Date CTA Certification Date CTA Certification Date CTA Certification Date CTA Certification Date CTA Certification Date		, trees, etc.)						
TSLICE Wind Speed Wind Direction (provide from/to, i.e. from North to South) Ambient Temperature APPOT 45 *F Alditional Comments/Information: NO EMISSIONS WERE OBSCRUET) FROM ANY EMISSION FOINT. Stack with Plume Sun Point Wind Direction Point Wind Direction OBSERVER (please print) Name: Title: **Relative Humidity 16 17 18 19 20 Average 6-Minute Opacity Range of Opacity Readings Min. Max. OBSERVER (please print) Name: Title: **REMARA OSTA Signature Observer Organization K 5 L Certification Date TA 2-28-07	TBLUE SKY	Chu Canditions	1.2			-		
Ambient Temperature APPOT 45 °F Additional Comments/Information: NO EMISSIONS WERE OBSCRUED FROM ANY EMISSION POINT. Stack with Plume Sun Point Wind Sun OBSERVER (please print) North Direction Point Wind OBSERVER (please print) Name: Title: **Richard Osta Observer Organization** **SUN OBSERVER'S POSITION **OBSERVER (please print) Name: **Title: **Richard Osta Observer Organization** **SUN OBSERVER'S POSITION **OBSERVER (please print) Name: **Title: **Richard Osta Observer Organization** **SUN OBSERVER'S POSITION **SUN Observer Organization** **SUN OBSERVER'S POSITION **SUN	Background Color		• 13					
Ambient Temperature APPOT 45 °F Additional Comments/Information: NO EMISSIONS WERE OBSCRUED FROM ANY EMISSION POINT. Stack with Plume Sun Point Wind Sun OBSERVER (please print) North Direction Point Wind OBSERVER (please print) Name: Title: **Richard Osta Observer Organization** **SUN OBSERVER'S POSITION **OBSERVER (please print) Name: **Title: **Richard Osta Observer Organization** **SUN OBSERVER'S POSITION **OBSERVER (please print) Name: **Title: **Richard Osta Observer Organization** **SUN OBSERVER'S POSITION **SUN Observer Organization** **SUN OBSERVER'S POSITION **SUN	7 (SCAC) Wind Dire	ection CCO1/C	1.4					
Ambient Temperature APPOY 45 "F APPOY 45 "	mph (provide fi	rom/to, i.e. from North to South)						
APPOR 45 °F Additional Comments/Information: NO EMISSIONS WERE OBSERVED FROM A NY EMISSION TOTAL. Stack with Plume Sun Point Wind Sun Point Wind Sun Point Wind Source Layout sketch Emission Point North Direction Nor	OTO 5 NNE	TO SSW	15					
Additional Comments/Information: NO EMISSIONS WERE OBSERVED FROM ANY EMISSION POINT. Stack with Plume Sun Draw Arrow in North Direction Point Wind Sun Draw Arrow in North Direction Sun Draw Arrow in North Direction Point Wind Sun Draw Arrow in North Direction Nor		4. /	16					
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Stack with Plume Sun Point Wind STACE Wind Draw Arrow in North Direction Wind DIR: OBSERVER'S POSITION OBSERVER'	NIO EMICCIPASO	UEME OBSERVEN					1	
Stack with Plume Sun Point Wind Sun	FROM ANYEM	ISSION POINT.			<u> </u>	 		
Stack with Plume Sun Draw Arrow in North Direction Sun Draw Arrow in North Direction Wind DIR. Draw Arrow in North Direction Point Wind DIR. Draw Arrow in North Direction			19			-		
Plume Sun Point Wind Construction Point Wind OBSERVER'S POSITION OB	Stack SOURCE L	AYOUT SKETCH	<u> </u>			<u> </u>		
Sun Point Wind Sun Point Win Point Wind Sun Point Wind Sun Point Wind Sun Point Wind Sun	with Q	Draw Arrow in	Average 6-M	finute C	pacity			
Sun Point Wind Name: Wind DIR. OBSERVER'S POSITION Certification Date 2-28-07		North Direction	II - O-				Min.	
Name: Title: Richard Osth Granger			OBSERVER	(please	print)			
WIND DIR. OBSERVER'S POSITION OBSERVER'S POSITION SUM CETTA OSTA ONSINGOR Signature Date 3-5-07 Observer Organization KSL Certification Date 2-28-07	11/1-4	$\overline{\mathbf{v}}$			•		Title:	
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Observer Organization Continue		Signature						
Observer Organization K 5 L Certification Date ETA Certification Date 2-28-07			1	7				7-6-00
OBSERVER'S POSITION SUM K S L Certification Date Certification D	Income V			<u></u>	3-			15901
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		AMONT FINE						

Los Alamos

LOS ALAMOS NATIONAL LABORATORY (LANL) VISIBLE EMISSION OBSERVATION FORM (6 MINUTE)

Source Name:		Observation Da			Start		End Time
LANL A	sphalt Plant	6.4	111	07	12	OLP	n 12:07 PM
Source Location:		Sec					
	Sigma Mesa)	Min	0	15	30	45	Comments
Type of Source	Type of Control Equipment	1	0	0	0	0	
Asphalt Plant	Baghouse	2		0	/*\	0	
Lescribe Emission Point (Top of sta			15-				
TOP OF Tieight Above Ground Level	Height Relative to Observer	3	0		0	0	
CAC Feet	Feet	4			0	0	
Distance From Observer	Direction of Source From Observer	5	-			0	
50 Feet	NW.	<u> </u>					
Description of Plume (stack exit on ULofting UTrapping ULooping		6	2				
Emission Color Plume Type	e Mo Plume Present	7					
Emission Color Plume Typ Continuo Continuo		8					
Water Droplets Present? SNO DYES If YES, droplet plum	e is 🗆 Attached 🗆 Detached	9				-	
At what point in the plume was opac	rity determined?	10	-				
APPROX. 12" to 14" Describe Background (i.e. blue sky,	AROVE SOURCE	11					
Packground Color SKY	(PT)	12					
Background Color S	Sky Conditions	13					
V and Speed Wind Direct	PARTY CLOURY (PT)	14					
mph (provide fro	om/to, i.e. from North to South)	15					
Ambient Temperature	・ <u> </u>						,
47 °F	12 %	16					
Additional Comments/Information:		17					
NO EMMS IONS U		18					
FROM ANY EMIS (ROADS, TRANSFER POL	NTS (STOCK PILES)	19					
Stack SOURCE LA	AYOUT SKETCH	20					
vith Q	Draw Arrow in	Average 6-Mi	nute O	pacity	F	Range o	f Opacity Readings
Plume Emiss	Month Direction	09		-	١	Ain.	9 % Max. No
Sun 💮 Poi		OBSERVER (orint)			10 010
Wind → X	マン・マンコ	Name:	.,	/		Title:	
		BICHAR	0	3st	7 Å		NGINCER
		Signature			•		Date
			0	•	armeden is discharge		4-12-07
Westernan	¥ , l	Observer Org					
	- Control						
	OBSERVER'S POSITION	Certified by			·····	· · · · · · · · · · · · · · · · · · ·	Certification Date
140		ETA					2-28-07
SUNTOCAT	IONTINE						



LOS ALAMOS NATIONAL LABORATORY (LANL) VISIBLE EMISSION OBSERVATION FORM (6 MINUTE)

Source Name:				Observation Da	te		Start "	l'ime	End Time			
	ANLA	Asphalt Plant		/\/AY	8,2	2001	8:5	77 AM	8:33 AM			
Source Location:	`A-60 (Sigma Mesa)		Sec Min	0	15	30	45	Comments			
Type of Source	(.	Type of Control Ec	quipment	1		_						
Asphalt Pla	ant	Bagho			0	0	0	0				
Describe Emission Poin	t (Top of st	ack, etc.)		2	0	0	0	0				
TOP OF Height Above Ground I		<i>ER</i> Height Relative to Ot		3	0	0	0	0				
	eet	Tiergin Remarks to Or	Feet	4	0	0	0	0				
Distance From Observe	r	Direction of Source F	rom Observer	5	0	0	0	0				
APPROX 50 Description of Plume (st		<i>N.W.</i>		6								
□Lofting □Trapping			oning	7	0	0	0	0				
■No Plume Present Emission Color	Plume Typ											
NO EMISSIONS		ous 🗆 Fugitive	□Intermittent	8								
Water Droplets Present?		ne is □Attached □[Detached	9								
At what point in the plui	-	,		10								
12"-TO 19" A Describe Background (i.	e. blue sky,	THE COUR.	CE	11								
PARTLY CCO Background Color				12								
_				13								
BCUE GRA Wind Speed				14								
-	-	om/to, i.e. from North	to South)	15								
Ambient Temperature	SVY	TO NE Relative Humidity	%	16								
48.7 Additional Comments/In	formation:	6/	/5	17								
1/1 5mlecina	< 11/10	RE SEEN FA	com ANY									
POINT AT THE	AST	THIS TIME	- FACILITY	18								
				19								
Stack SOL	RCE L	AYOUT SKETO	СН	20								
with O Plume			Draw Arrow in	Average 6-Min	ute Op	acity	Į.	-	Opacity Readings			
	Emis		North Direction)%		N	lin.	Max.			
Sun 🔱	Po	int	(A)	OBSERVER (r	olease p	orint)			<u> </u>			
Wind ——	7	ζ.		OBSERVER (please print) Name: Title:								
				RICHARD COSTA ENGIN								
			,	Signature				-	Pate			
		φ -	- } ~		-O5	77			5-8-07			
7		1h	1	Observer Orga		n						
OMINA		/ OBSERVER'S POSI	SUN I	Certified by			·	10	ertification Date			
_	140				"ز حسوسی	l						
<i></i>					7 F	·			2-28-07			
S	UN LOCAT	TION LINE										

Los Alamos National Laboratory METHOD 22 FUGITIVE OPACITY EMISSION INSPECTION FORM Observer Affiliation: ENV-EAQ / LANL Location: LANL Asphalt Plant - Sigma Mesa Representative: David Paulson (1) Date of Inspection: June 20, 2007 Wind Direction: To the NE Sky Conditions: Partly Cloudy Wind Speed: 5-10 mph Precipitation: None Process Unit: All potential fugitive sources Industry: National Defense Sketch of Process Unit: Indicate: * observer position relative to source * wind direction * potential emission and/or actual emission points * North direction sun location Conveyor Bag house Stack North Direction Elevator Don's location Shaker Wind Direction Dave's location Observations: (see note (2) below) Accumulated emission Clock Time Observation period time (min:sec) duration (min:sec) 0 (2) 8:04 1:01 pm Begin **End Observation** 1:09 pm Notes: (1) The observation was attended by both Dave Paulson (ENV-EAQ) and Don Stone (KSL Environmental). The observation was initiated by Dave at the location on the sketch. Don took a position further to the East to get a clearer view of the conveyor belt and any other potential fugitive emissions from that side of the plant. (2) No visible emissions were observed at the plant. All probable fugitive sources at the plant were observed. This form is used to document any fugitive emission with opacity greater than zero is observed. If an emission is observed during the Method 22 inspection/observation period (which must be at least 6 minutes for the Asphalt Plant and 10 minutes for all other LANL sources), a Method 9 visible emission test may need to be performed. SIGNATURE OF OBSERVER/INSPECTOR: 6-20-07

Attachment B Beryllium HEPA Filter Tests Results

Summary Table, Reports Attached

Unit	Date	Pass/Fail
TA-55 (H-5-1430) (FF-852)	4/11/2007	Pass
TA-55 (H-5-1440) (FF-853)	4/11/2007	Pass

100 AREA GLOVEBOX EXHAUST IN-PLACE HEPA FILTER TESTING

ATTACHMENT A 100 Area Glovebox Exhaust FF-852 Data Sheet

Date: 24	-11-07 Expiration 3.4.1)	pration Date: <u>03 - 06 0名</u> I	illuter Calibration Expiration Dat	on e: <u>06 - W</u> (8.4	9-07	Pilution Ratio: 2064
Step Number		ltem		100-		(8.4.2) FF-852 H-5-1430
9.1.12.2	Background conc	entration (part./cc)			1.4(2	
9.1.12.3	Upstream concen	tration (part./cc)		· · · · · · · · · · · · · · · · · · ·	2.188X	,
9.1.12.4	Challenge aeroso	I concentration betwee	n 2.00 x10 ⁶ aı			
9.1.12.5	1 st stage downstre	eam concentration (part	t./cc)		6,161%1	
9.1.12.6	2 nd /3 rd stage down	stream concentration (part./cc)			YLO part concentration
9.1.12.7	1 st stage Penetrati	on ≤ 5.0 x10 ⁻⁴ (efficiend	cy ≥ 99.95%)		Ŧ.	.X10 ⁵
9.1.12.8	2 nd /3 rd stage Pene	tration ≤ 2.5 x10 ⁻⁷ (effic	iency ≥ 99.99		0.0	
9.1.13.3 9.1.13.4	Ensure all test por	Initials	m VM— Independent Verification			
	Valve	Required Position	Initials	Indepe	endent	and the case of th
	HV-852-H	Closed and Locked	po	MW		
	HV-852-G	T.				
	HV-852-F	· · · · · · · · · · · · · · · · · · ·				
	HV-852-D	Closed	w	N W		
	HV-852-C	Closed	(1)	(MV)		
	HV-852-B	Closed	HILO	7 1	al l	
	HV-852-A	Closed	W	· · · · · · · · · · · · · · · · · · ·	77	L'UL
	HV-852-AA	Closed	fel)	M	水流	and the second
Comments:				Ç	Or.	N. O. H. W. H. J. W. A.
Surveillance	Padl A	A 4-11-07 S	OC On-duty			
Personnel (Signature	Date S	Supervisor	Si _n	<u>ا سکر۔</u> gnature	$\frac{9/11/37}{\text{Date}}$

1)

100 AREA GLOVEBOX EXHAUST IN-PLACE HEPA FILTER TESTING

ATTACHMENT B 100 Area Glovebox Exhaust FF-853 Data Sheet

	LAS Calibration Expiration Date: 03-86-08 Diluter Calibration Expiration Date: (8.4.3)	Dilution Ratio: 2064 (8.4.2)
Step Number	ltem	FF-853 H-5-1440
9.2.12.2	Background concentration (part./cc)	3.531Xib part concentration
9.2.12.3	Upstream concentration (part./cc)	2. 400X16 part concentration
9.2.12.4	Challenge aerosol concentration between 2.00 x10 ⁶ and 2	.71 x x10 ⁶ part./cc) /- Initials
9.2.12.5	1 st stage downstream concentration (part./cc)	7.536X10 part. concentration
9.2.12.6	2 nd /3 rd stage downstream concentration (part./cc)	1.059X10 part concentration
9.2.12.7	1 st stage Penetration ≤ 5.0 x10 ⁻⁴ (efficiency ≥ 99.95%)	3.14210-5
9.2.12.8	$2^{\text{nd}}/3^{\text{rd}}$ stage Penetration $\leq 2.5 \times 10^{-7}$ (efficiency ≥ 99.99997	5%) 2.943×10-9
9.2.13.3 9.2.13.4	Ensure all test port ball valves are closed	PCO Initials Independent Verification

Valve	Required Position	Initials	Independent Verification	
HV-853-H	Closed and Locked	FW	Maria	
HV-853-G	Closed	M	toun	
HV-853-F	Closed	NO	Ten al	
HV-853-D	Closed	Ry	Jana	
HV-853-C	Closed	(LI)	N WI	The same of the sa
HV-853-B	Closed	RNO	MUN	$\langle O \rangle$
HV-853-A	Closed	40	Musell	1
HV-852-AA	Closed	40	MA	

Surveillance Defended 4-11-07 OC On-duty
Personnel Signature Date

Signature Date

Signature Date

Attachment C Boilers and Heaters Natural Gas Usage

2007 TA-21 Steam Plant Data Entry / Fuel Use

	一 にろこと ロズニスコ	ロズースプ				
	Monthly	Monthly Fuel Use				
	TA-21-357	1-357	Converted		Natural Gas Use	Filel Oil Ilsa
	Natural Gas	Fuel Oil	Natural Gas			12-Month Rolling Total
Month	(MCF)	(gallons)	(MMscf)	Month	(MMscf)	(Gallons)
January	3184	0	3.184	January	29.16	402
February	2895	9	2.895	February	28.58	411
March	2853	10	2.853	March	27.87	421
April	2297	6	2.297	April	27.65	427
May	2172	3	2.172	Мау	27.82	430
June	1803	41	1.803	June	27.91	471
July				July		
August				August		
September				September		
October				October		
November				November		
December				December		
Annual Totals:	15204	69	15.204			
Jan June	15204	69	15.204			With the second of the second
July - Dec.	0	0	0.000		and 10,000 gaily	and 10,000 gallyr fuel oil (12 month rollir

month rolling total)

2007 Small Boilers Data Entry / Gas Use

				[Da	ta								-	
TOTAL	December	November	October	September	August	July	June	May	April	March	February	January	Month		
4913							0	1379	1248	1609	676	>	BHW-1B (B-602)	TA-55 Boil (MS	A.
6931							379	1836	797	_	1261	2657	BHW-2B (B-603)	TA-55 Boiler Gas Use (MSCF)	Metered Boilers
0.1							0.1						BS-1	TA-50-2 (MSCF))rs
289,448							13,530	29,468	44,215	54,352	66,101	81,782	(MSCF)	Total Gas Use	
289.45							13.53	29.47	44.22	54.35	66.10	81.78	(MMSCF)	as Use	
277.60							13.15	26.25	42.17	52.74	64.16	79.12	(MMSCF)	Non-Metered Gas Use	
Permit Limit : 870							518.20	521.07	513.53	505.10	508.94	502,42	all Small Boilers (MMSCF)	12-Month Rolling Total for	

Estimated Gas-Use per MMBtu rating Jan-June:	2006 Non Metered Boiler Pool Capacity:
	308.7
0.90	MMBTU/hr
MMscf/MMBtu/hr	

Estimated Gas-Use per MMBtu - Annual

0.00 0.90

MMscf/MMBtu/hr MMscf/MMBtu/hr

Estimated Gas-Use per MMBtu rating July-Dec:

MMSCF= Million Standard Cubic Feet MSCF = Thousand Standard Cubic Feet

Definitions:

boiler(s) only. Metered/Non-metered: Metered boilers are those units that have unit specific volumetric flow meters for the

				Gas Use Non-Me	Von-Metere	tered (MMSCF)			
					_				Insignificant
AIRS Stack #	015	016	017	018	019	020	021	024	Units
Location:	TA-48-1	TA-48-1	TA-48-1	TA-53-365	TA-53-365	TA-59-1	TA-59-1	TA-16-1484	Lab Wide
ID:	BS-1	BS-2	BS-6	BHW-1	BHW-2	BHW-1	BHW-2	Plant 5	Various
Design Rate (MMBTU/hr)	5.336	5.335	7.140	7.115	7.115	5.335	5.335	12.700	253
Calculated Gas Use-Jan-June	4.799	4.798	6.421	6.398	6.398	4.798	4.798	11.421	227.774
Calculated Gas Use-July-Dec	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Calculated Gas Use-Annual	4.799	4.798	6.421	6.398	6.398	4.798	4.798	11.421	227.774

Attachment D
Carpenter Shop Hours of Operation

2007 TA-3 & TA-15 Carpenter Shops

1 A=3	Data Entry
	Hours of Operation 1
Month	TA-3
January	3.1
February	4.3
March	25.6
April	4.6
May	3.4
June	2.3
6 mo. Total	43.30

**************************************	Data Entry
	Hours of Operation ¹
Month	TA-15
January	9.4
February	17.4
March	47.2
April	13.6
May	20.6
June	8.9
6 mo. Total	117.1

6 mo. Total:	December	November	October	September	August	July	Month		\frac{7}{5}	6 mo. Total:	December	November	October	September	August	July	Month		A G	
0.0							TA-15	Hours of Operation ¹	Data Entry	0.00							TA-3	Hours of Operation ¹	Data Entry	

Reference

1. Based on information provided monthly by the shop foreman from each shop.

> each not operate in excess of 4368 hours per year. Saws, drills, shaping and sanding equipment shall

> Attachment E Degreaser Solvent Usage

Historical Solvent Usage Data

The usage information for UT Bath degreaser from Jan-01-2007 through Jun-30-2007 is displayed below.

General Degreaser Information

TA: 55

Solvent: Trichloroethylene

Date Measured	Initial Solvent Level (inches)	Volume Added (liters)	Level Added (inches)	Volume Removed (liters)	Level Removed (inches)
Jan-17-2007	7.0	0.98	0.50	0.0	0.0
Feb-06-2007	7.5	0.00	0.00	14.74	7.5
Feb-14-2007	0.0	14.74	7.50	0.0	0.0
Mar-21-2007	7.2	0.30	0.15	0.0	0.0
Apr-04-2007	7.0	0.98	0.50	0.0	0.0
Apr-18-2007	7.5	0.00	0.00	14.74	7.5
Apr-30-2007	0.0	15.73	8.00	0.0	0.0
May-30-2007	8.0	0.00	0.00	0.0	0.0
Jun-26-2007	7.2	15.53	7.90	14.15	7.2

Attachment F Internal Combustion Generator Hours of Operation

2007 Generator Hours

0.0	TOTAL		455.1	TOTAL						se	Generators in use	46	
				62.5	May-07		Nov-05	Diesel	1250	DFLC-5568730	Cummins	33	69
				189.9	Jun-07	İ	Dec-05	Diesel	20	20.0DL4-15R	Onan Sons	39	64
			5,1	153,1	May-07	148.0	Nov-05	Diesel	250	250DVG	Onan Sons	> !	64
				715.9	Jun-07	715.9	Nov-05	Diesel	20	3166-0084	Murphy	Yard	සු
				750 O	Jun-07	749 3	Nov-05	Diesel	90	2884-0703	Allis Chalmers	-	59
***************************************				96.1	May-07	88.8	Dec-05	Diesel	400	DFEB-4963414	Cummins	142	55
			11.0	526.6	May-07	515.6	Nov-05	Diesel	200	1465	Onan Sons	47	55
			0.0	47.3	Jun-07	47.3	Dec-05	Diesel	40	40DL6T	Onan Sons	28	ဌာ
- Control of the Cont			9.4	62.0	Jun-07	52.6	Dec-05	Diesel	1250	1250DFLC-4987	Onan Sons	364	55
And the state of t			9.0	814.3	Jun-07	805.3	Dec-05	Diesel	600	E7014DD	Delco/Detroit	8	55
			3.1	74.4	May-07	71.3	Dec-05	Nat. Gas	100	100RZ71	Kahler	5	55
			14.1	306.1	May-07	292.0	Nov-05	Diesel	500	95M-07874-F	Olympian	412	στ 4
			0,0	581.5	May-07	581.5	Nov-05	Nat. Gas	12.5	12.5JC-18R/16095AA	is	S	53
			0.0	194.3	May-07	194.3	Nov-05	Diesel	50	Kamag-14	Kato Eng.	2	55
			29.7	1195.1	May-07	1165.4	Nov-05	Nat. Gas	66	60ENA	Onan Sons		53
			0.0	149.0	Jun-07	149,0	Nav-05	Diesel	1250	L940563879	Onan Sons	188	50
			56.1	209.7	May-07	153.6	Nov-05	Nat. Gas	150	DGFA-568741	Onan Sons	184	50
			4.0	489.1	May-07	485.1	Nov-05	Diesel	500	680FDR5059FF	Cummins	37	50
			8.9	24.9	May-07	16.0	Nov-05	Diesel	300	DFCB-5740130	Onan Sons	45	48
			26.6	900,4	May-07	873.8	Nav-05	Diesel	300	300DEFCB	Onan Sons	335	46
			26.5	589.1	May-07	562.6	Nov-05	Diesel	150	DVE		-	43
***************************************			9.6	379.0	May-07	369.4	Nov-05	Diesel	50	4BT3,9-GC	Cummins	_	43
2.04444			0.0	107.4	Jun-07	107.4	Jun-07	Diesel	60	DGCB-5674244	Cummins	402	35
			0.0	115.3	Jun-07	115.5	Dec-05	Diesel	100	100DGDB	Onan Sons	2	35
			0.0	7643.1	Jun-07	7643.1	Nov-05	Diesel	80	80DG10A	Onan Sons	Point	33
			21.5	293.9	Jul-07	272.4	Feb-07	Diesel	1000	DFHD-4964979	Cummins	yard	60
			0.0	9.3	Jun-07	9.3	Nov-05	Diesel	1600	1600ROZD	Konler	208	33
			0.0	2944.0	Jun-07	2944.0	Nov-05	Diesel	225	XQ225	Caterpillar	151	33
			0.0	1555.0	Jun-07	1555.0	Jun-07	Diesel	60	MEP 006A	Kurz & Root	87	33
			0.0	919.0	Jun-07	919.0	Nov-05	Diesel	30	30ROZ	Kohler	20	33
			43.5	541.0	May-07	497.5	Nov-05	Diesel	125	SR-4		357	22
			7.4	180.8	Jun-07	173.4	Dec-05	Diesel	275	275DFML29807N	Onan Sons	31	18
			19.5	1058.9	May-07	1039.4	Nov-05	Nat. Gas	60	60ENA	Ö	1374	16
			49.9	276.2	Jun-07	226.3	Dec-05	Diesel	1100	KTA50-G2		980	ਨੰ
			7.7	336.8	May-07	329.1	Nov-05	Diesel	80	DGDA-5005757	<i>(</i>),	2322	ω
***************************************			12.0	315.0	May-07	303.0	Nov-05	Diesel	600	SR-4	, i	1498	ω
			36.3	324.2	Jun-07	287.9	Dec-05	Diesel	1250	DFLC-5554001		1404	ω
			0.1	14.1	May-07	14.0	Apr-07	Diesel	400	DFEH-5699616	Cummins	1400	ω
			15.5	116.7	Jun-07	101.2	Dec-06	Diesel	35	DGBB-5601289	Cummins	1076	ω
			5.3	74.8	May-07	69.5	Dec-06	Diesel	008	0125005-V9JG	Cummins	440	ω
			0.0	121.8	May-07	121.8	Dec-06	Diesel	150	500FDR5051	Cummins	440	ω
			3.1	481.1	May-07	478.0	Dec-06	Nat. Gas	45	45.OEM-15R/10742D	Onan Sons	223	ω
			2.9	6.1	May-07	3.2	Dec-06	Diesel	150	1500DVE15R31374B	Onan Sons	40	ယ
			11.9	1158.9	May-07	1147.0	Dec-06	Diesel	150	150DGFA	Cummins	38	ω
			10.0	2629.4	May-07	2619.4	Dec-06	Diesel	350	350DFCC	Onan Sons	38	ω
			2.6	3057.0	May-07	3054.4	Dec-06	Diesel	175	H1750DSG15	Onan Sons	38	ω
Hours Run	Reading	Date	Hours Run	Reading	Date	Reading	Date	Fuel Type	KW	MODEL	Manufacturer	Bldg	TA
		12 Month			6 Month	Drawia ia	Previous						
lings 2007	Second 6 Month Readings 2007	Second 6	ngs 2007	First 6 Month Readings 2007	First 6 M								
-						_							

N/R = Not Read

Annual Average of hours per unit 10.4

First half average hours per unit 10.4 Second half average hours per unit

Attachment G
Data Disintegrator Box Throughput

2007 TA-52 Data Disintegrator

		•			
			6,742	(2007):	Annual Boxes (2007):
	0	6 mo. Total:		6,742	6 mo. Total
		December	10602	992	June
		November	10989	1719	May
		October	10293	799	April
		September	10199	2206	March
		August	8759	542	February
		July	9257	484	January
Rolling Total	Shredded	Month	Rolling Total	Shredded	Month
12-Month	Boxes ^(c)		12-Month	Boxes ^(c)	
	Data Entry			Data Entry	

Attachment H
Power Plant Natural Gas and Fuel Oil Usage

TA-3 Power Plant Fuel Use Totals 2007 (Data Entry) DATA ENTRY

	TA-3-22 Po	TA-3-22 Power Plant	TA-3-22 Power Plant	ower Plant	TA-3-22 Po	Power Plant		
	Boiler # 1 (Edgemoor Iron	dgemoor Iron	Boiler # 2 (Edgemoor Iron	lgemoor Iron	Boiler # 3 (Unio	nion Iron Works,		
	Works, 210 MMBTU/hr)	MMBTU/hr)	Works, 210 MMBTU/hr)	MMBTU/hr)	210 MM	/MBTU/hr)	Monthly Totals	Totals
	Natural Gas	Fuel Oil	Natural Gas	Fuel Oil	Natural Gas	Fuel Oil	Natural Gas	Fuel Oil
Month	(MCF)	(gallons)	(MCF)	(gallons)	(MCF)	(gallons)	(MMCF)	(gallons)
January	11,719	319	31,832	0	31,733	0	75.284	319
February	36,598	0	21,940	347	611	0	59.149	347
March	38,858	438	4,328	212	8,387	406	51.573	1056
April	9,160	0	3,101	603	29,807	0	42.068	603
Мау	362	27,893	10,074	438	24,198	50,133	34.634	78464
June	0	0	0	0	0	0	0.000	0
July								
August								
September								
October								
November								
December								
Annual Totals:	96,697	28,650	71,275	1,600	94,736	50,539	262.708	80789
Jan June	96,697	28,650	71,275	1,600	94,736	50,539	262.708	80789
July - Dec.	0	0	0	0	0	0	0.000	0

	12-Mo. Rolling Total	12-Mo. Rolling Total
Month	Natural Gas (MMscf)	Fuel Oil (gallons)
January	615.3	21463
February	616.0	21097
March	609.8	21231
April	601.9	21456
May	602.6	99269
June	573.2	98611
July		
August		
September		
October		
November		
December		

Permit Limits:

2000 MMscf

500,000 gallons

0.00	0.00	July - Dec.
80789.00	262.71	Jan June
80789.00	262.71	Annual Totals:
(Gallons)	(MMscf)	
Fuel Oil	Natural Gas	
el Type	Totals by Fuel Type	

Attachment I Power Plant Opacity Reports

Summary Table, Reports Attached

Source	Date	Time	*Average Opacity
TA-3-22 Power Plant	01-11-07	10:22 am	0%
	01-11-07	10:32 am	0%
	01-11-07	10:42 am	0%
	01-11-07	10:52 am	0%
	01-11-07	11:02 am	0%
	01-11-07	11:12 am	0%
	01-11-07	11:22 am	0%
	01-11-07	12:11 pm	18.25%
	01-11-07	12:21 pm	0%
	01-11-07	12:31 pm	0%
	01-11-07	12:47 pm	0%
	01-11-07	12:57 pm	0%
	01-25-07	11:10 am	0%
	01-25-07	11:48 am	0%
	02-08-07	11:12 am	0%
	02-08-07	11:22 am	0%
	02-08-07	11:32 am	0%
	02-22-07	10:37 am	0%
	02-22-07	10:47 am	0%
	02-22-07	11:30 am	4.625%
	02-22-07	12:12 pm	0.875%
	02-22-07	12:22 pm	0.375%
	02-22-07	12:32 pm	0%
	02-22-07	12:46 pm	0%
	02-22-07	12:56 pm	0%
	03-06-07	10:39 am	2.75%
	03-06-07	10:49 am	0%
	03-06-07	10:59 am	0%
	03-20-07	10:35 am	0%
	03-20-07	10:45 am	0%
	03-20-07	10:55 am	0%
	03-27-07	9:52 am	3.5%
	03-27-07	10:02 am	0%
	03-27-07	10:12 am	0.5%
	03-27-07	10:22 am	0%

TA-3-22 Power Plant	03-27-07	10:32 am	0%
	03-27-07	10:42 am	0%
	03-27-07	10:52 am	0%
	04-10-07	8:00 am	0%
	04-10-07	8:33 am	0%
	04-24-07	10:38 am	0%
	04-24-07	10:48 am	11%
	04-24-07	10:58 am	0%
	04-24-07	11:08 am	0%
	05-01-07	9:48 am	1.25%
	05-01-07	9:58 am	25%
	05-01-07	10:32 am	0.875%
	05-01-07	10:42 am	0%
	05-01-07	10:52 am	0%
	05-11-07	8:35 am	2.0%
	05-11-07	8:45 am	0.875%
	05-11-07	8:55 am	0.87370
	05-11-07	9:05 am	0%
	05-11-07	9:15 am	0%
	05-11-07	9:25 am	0%
	05-11-07	9:35 am	0%
	05-11-07	9:45 am	0%
	05-11-07	10:12 am	0%
	05-11-07	10:22 am	0.875%
	05-15-07	13:24 pm	10.375%
	05-15-07	13:34 pm	6.25%
	05-15-07	13:44 pm	0.25%
	05-15-07	13:54 pm	0%
	05-15-07	14:04 pm	0%
	05-15-07	14:14 pm	0%
	05-15-07	14:24 pm	0%
	05-15-07	14:34 pm	0%
	05-15-07	14:44 pm	0%

^{*} Average opacity for the Power Plant is the sum of the highest consecutive 40 readings divided by 40 (10 minutes of readings). The method is in accordance with 20.2.61 NMAC.

6			
LOS ALAMOS NATIONAL I			
VISIBLE EMISSION OBSERVA			
Source Name:	Observation Date	Start Time	End Time
#1 Bouck Fuce OIL	1-11-07	1022	1031
Source Location:	Sec		
TA 3 SM 22 STEAM PLANT Type of Source Type of Control Equipment	Min 0 15	30 45	Comments
1/1 1	1 00	00	
VIESTL FUEL NA			
Describe Emission Point (Top of stack, etc.)	1 2 0 0	00	
TOP OF WEST STACK	3	Δ	
Height Above Ground Level Height Relative to Observer	100		····
150 Feet 170 Feet	1 4 000	001	
Distance From Observer Direction of Source From Observer	5 00		
フ2 Yards 5 E	3 00		
Description of Plume (stack exit only)	600	00	
Oil offing Dirapping Oil coping OF anning OConing		19191	<u> </u>
	7 00	1001	
BLACK Plume Type Two Plume Present Continuous Fugitive International Plume Type	8	\triangle	
Water Droplets Present?		191	
DIO DYES If YES, droplet plume is DAttached DDetached	9 00	00	
At what point in the plume was opacity determined?	10 00		
TOP OF WEST STOCK	10 00	1991	******
To D oF WEST STACK Describe Background (i.e. blue sky, trees, etc.)	10		
BLUE - WHITE SKY Buckground Color BLUE - WHITE SCOTTELED		100 0 0 2 10	237 WS 1023
Background Color Sky Conditions			
BILLE -WHITE SCATTERED	4-7-1823 #46-4	155 4 53	Py Programs
wind Speed wind Direction			Circ Original Control
mph (provide from/to, i.e. from North to South)	eti C erts At at		
2-1 FroWEST		100	
Ambient Temperature Relative Humidity			
	2 & 16 A 2 16 2 1 0 3 1	CARREN	Out of the second
Additional Comments/Information:		F 5 8 5 4	Arran er er
	La constant de la constant de la constant de la constant de la constant de la constant de la constant de la co	Production of a	
			A
Stack SOURCE LAYOUT SKETCH	Afmile Live	fire by sign	No. of the con-
with Q	Average 10-Minute Opacit	Pance	Opacity Readings
Plume Draw Arrow in Emission North Direction	Average 10-Marine Opacit	Min.	Max.
Sun + Point			
Wind - X 7	OBSERVER (please print)	٥	permon
	Name:	Title:	
	Name: AC Signature	440	***************************************
E TOW	Signature)	Date
	1-11		1-11.07
	Observe Organization	<u> </u>	
OBSERVER'S POSITION	Certified by	<u> </u>	Certification Date
	Councilly		
1409	I ETH		8-29-06

SUN LOCATIO SEINE			

LOS ALAMOS NATIONAL L	ABORATORY (LANI	.)	
VISIBLE EMISSION OBSERVA	TION FORM (10 MINI	UTE)	
Scirce Name:	Observation Date	Start Tur.	End Time
# 1 BOILER FUEL OIL	1-11-07	1032	1041
Source Location:	Sec	20 45	Comments
Type of Source Type of Control Equipment	Min 0 15	30 45	Comments
	1 00	00	
DIESCI FUEL NA	2 00	00	
Describe Emission Point (Top of stack, etc.)	1-04	+ - +	
Top of WEST STACK Height Above Ground Level Height Relative to Observer	3 00	00	
Height Above Ground Level Height Relative to Observer	4 00	00	
Distance From Observer Direction of Source From Observer			
7) Yards < F	5		
Description of Plume (stack exit only)	6 00		
OLofting OTrapping OLooping OFaming OConing			
Emission Color / Plume Type No Plume Present	7 00	1010	
Continuous OFugitive Cintermittent	8 7	1001	
Water Droplets Present?			
NO DYES If YES, droplet plume is LiAttached LiDetached	9 0 0	1918	
At what point in the plume was opacity determined?	10 00	00	
Describe Background (i.e. blue sky, trees, etc.)		19.24.5	
Describe Background (i.e. blue sky, trees, etc.)		Zi wan i	terate serbies
BLUE SKY WHITE CLOUDS Background Color Sky Conditions			
Background Color / Sky Conditions RIUE - WHITE SCATTERED			
Wind Speed Wind Direction			
mph (provide from/to, i.e. from North to South)			
2-1 E-W			10.0
Ambient Temperature Relative Humidity		ili ditama in ana	200
<u> </u>		And the spinote of the second of	
Additional Comments/Information:	SO THE SMARKS		Service Service
			THE CHARGE
·	1952		
CONDOE Y ANOUT OF CHOIL	20 22 25 E		-12 h 1 4 4 6
Stack with SOURCE LAYOUT SKETCH	A STATE OF THE PROPERTY OF THE PROPERTY OF THE PARTY OF T		
Plume North Direction	Average 10-Minute Opac	ity Range o	of Opacity Readings Max.
Emission		1) """ 0
Sun # Point	OBSERVER (please prin	t)	
$w_{\text{ind}} \rightarrow (X)$	Name:	Title:	
	LOUNDED YAG	160	154
4 1 1 1	Signature		Date
	1811	-	1-11-07
	Observer Organization		<u> </u>
	1/5/ 1/	105	
OBSERVER'S POSITION	Certified by	<i>y</i>	Certification Date
140	LETA		<u> </u>
SUN LOCATION LINE			
1 Oct Description	I		

• Los Alamos LOS ALAMOS NATIONAL I VISIBLE EMISSION OBSERVA		
Source Name:	Observation Date	Start Tim' End Time
BOILER # 1 PIESEL FUEL	1-11-07	1042 1052
Source Location: TA 3 5M 22 JOWER DLANT Type of Source 1 Type of Control Equipment	Sec Min 0 15	30 45 Comments
Type of Source Type of Control Equipment	1 00	00
Describe Emission Point (Top of stack, etc.)	$\frac{2}{2}$ O O	00
TO P OF WEST STACK Height Above Ground Level Height Relative to Observer	3 00	
150 Feet 170 Feet	4 00	00
Distance From Observer Direction of Source From Observer	5 00	00
Description of Plume (stack exit only)	6 0 0	00
□ ILofling □ Trapping □ ILooping □ Fanning □ Coning □ From Plume Present	7 00	00
Emission Color Plume Type	8 00	00
Water Droplets Present? MO CIYES If YES, droplet plume is Clattached CiDetached	9 00	00
At what point in the plume was opacity determined?	10 00	00
Describe Buckground (i.e. blue sky, trees, etc.)	own Balletin	5, 1, 2, 3 , 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7,
RIVE SKY - WHITE CLOUDS		
BLUE SKY - WHITE CLOUDS Background Color ZLUE - WHITE SKY Conditions ZLUE - WHITE SCATTERED		
Wind Speed Wind Direction		
mph (provide from/to, i.e. from North to South) $S - N$	-e- Hair a pri	Serve for the first service of
Ambient Temperature Relative Humicity		
Additional Comments/Information:		可能以外的数据
Augustia Commission management	SELAN SALES	se main a s
	10 May 10 10 10 10 10 10 10 10 10 10 10 10 10	为" 对我们" "这一""是
Stack SOURCE LAYOUT SKETCH	2,20 to 15 to 1	
with Draw Arrow in Plume North Direction	Average 10-Minute Opacity	
Sun + Point	Opportunities (also see a)	
$w_{\text{ind}} \longrightarrow X$	OBSERVER (please print) Name:	Title
/ /	Signature AUS	Date
' '1	SHA	- 1-11-07
	Observer Organization	,
OBSERVER'S POSITION	Certified by	Certafication Date
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SUN LOCATION LINE		

LOS ALAMOS NATIONAL I	LABORATORY (LAN	TA.
VISIBLE EMISSION OBSERVA		
Source Name:	Observation Date	Start Time End Time
BOUGE # 1 FUEL OIL	1-11-07	1052 1101
Source Location:	Sec	20 45 0
TA 3 SM 22 DONER DUNT Type of Source Type of Control Equipment	Min 0 15	30 45 Comments
1 a	100	00
Describe Emission Point (Top of stack, etc.)	2 6	
TO OF WEST STANK	3	
Height Above Ground Level Height Relative to Observer	1300	<u> </u>
150 Feet 170 Feet	4 06	00
Distance From Observer Direction of Source From Observer	5	
12 3 6		
Description of Plume (stack exit only) Clofting Cirrspping Clooping Ciraming Coning	6 00	
- Erko Piume Present	7 00	
Emission Color Plume Type Envi Plume Present Continuous Fugitive Clintermittent	8 0 0	100
Water Droplets Present?		
NO DYES If YES, droplet plume is Dattached Detached	9 0 0	200
At what point in the plume was opacity determined?	10 00	200
Describe Background (i.e. blue sky, trees, etc.)	10.00	
RIVE SKU - WHITE LINES		
Background Color Sky Conditions		
BLUE SKY - WHITE CLANS Background Color Sky Conditions BUE - WHITE SCATTERED Wind Speed Wind Direction	3.1 50 (250.5)	
mph (provide from/to, i.e. from North to South)		
2/ 5.10.		
Ambient Temperature Relative Humidity		
	: The book	
Additional Comments/Information:	CHRISTIAN AND AND AND AND AND AND AND AND AND A	
Stack SOURCE LAYOUT SKETCH	20 4 3 6	
with Q	Average 10-Minute Opac	ity Range of Opacity Readings
Plume Draw Alrow in North Direction	Average 10-Minute Opac	Min. Max.
Sun Point		
$ W_{\text{ind}} \rightarrow \langle \hat{X} \rangle \rangle$	OBSERVER (please prin Name:	t) Title:
M W	LEDNATO PA	
-444	Signature	HECO OPERATOR Date
	111	1-11-07
/ /	Observer Organization	
ODGEDVANIE DOGETION	KSL UP	Certification Date
OBSERVER'S POSITION	Certified by	
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SUN LOCATION LINE		

A	- INODITODAL (T. 1717.)
Los Alamos LOS ALAMOS NATIONAL	
VISIBLE EMISSION OBSERVA	Observation Date Start Time End Time
Source Name: NOVER # 1 DIESEL FUEL	
ACTION AND ADMINISTRATION OF THE PROPERTY OF T	
TA 3 5M 22 DOWER PLANT Type of Source Type of Control Equipment	Min 0 15 30 45 Comments
Type of Source Type of Control Equipment	10000
DIESELFIEL NA	1 , 0000
Describe Emission Point (Top of stack, etc.)	1 2 0000
TOD OF WEST STACK	3 0000
Height Above Ground Level Height Relative to Observer	
150 Feet 170 Feet	1 4 0000
Distance From Observer Direction of Source From Observer	5 0000
72 Yards 5-E	
Description of Plume (stack exit only)	
OLofting OTrapping OLooping OFanning OConing	7 0000
Emission Color Plume Type Ano Plume Present	II
None Occaritmous OFugitive OIntermittent	
Water Dropiets Present?	9 0000
MNO DYES If YES, droplet plume is DAltached DDetached	
At what point in the plume was opacity determined?	
Describe Background (i.e. blue sky, trees, etc.)	
Describe Background (i.e. blue sky, trees, etc.)	
Background Color Sky Conditions	
BLUE SKY -WHITE CLOUDS Background Color BLUE -WHITE SCATTERES	A STATE OF THE STA
Wind Speed Wind Direction	
mph (provide from/to, i.e. from North to South)	Late 14.2 to 1
2-1 3-N	
Ambient Temperature Relative Humidity	
Additional Comments/Information:	。在14年20日 6.1 4.5 Ferrifical Conference
Additional Comments into institut.	
	Environmental English
COURCE I AVOIT SEETOH	
Stack SOURCE LAYOUT SKETCH	
Plume Draw Arrow in North Direction	Average 10-Minute Opacity Range of Opacity Readings Min. Max.
Sun Doint Emission	
	OBSERVER (please print)
Wind -	Name: Title:
$\mathcal{H} 0$	Name: Itue: OPERATOR Signature Date
/ \ / \ / \ / \ / \ / \ / \ / \ / \ /	Signature 1
/ ""/	Signature PAUMICO OPERATOR 1-11-07
	Observe Organizatio:
	KSL -UPPS
OBSERVER'S POSITION	Certification Date Certification Date
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	E7A 8-06
SUN LOCATION LINE	

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• Los Alamos LOS ALAMOS NATIONAL		
VISIBLE EMISSION OBSERVA	TION FORM (10 MIN)	UTE)
Source Name:	Observation Date	Start Time Ford Time:
BOILER #1 PIESEL FUEL	1-11-07	11/12 1121
Source Location:	<u> </u>	11//21/21
1	Sec	20 45 0
TA 3 SM 22 POWER PLANT Type of Source Type of Control Equipment	Min 0 15	30 45 Comments
Type of Source Type of Control Equipment	1 1 00	
DIESEL FUEL NA		
Describe Emission Point (Top of stack, etc.)		$ \mathcal{O}(\mathcal{I}) $
.		
Height Above Ground Level Height Relative to Observer	1 3 CA	() ()
100	1 4 000	
Distance From Observer Direction of Source From Observer	5 (1)	
72 Yards 5 E	1 - 3 - 10 - 10	VV
Description of Plume (stack exit only)	6 00	
OLofting OTrapping OLooping OFerming OCening		<u> </u>
The Plume Present	1 7 00	10101
Emission Color Plume Type Ano Plume Present		
VING Continuous Fugitive Clintermittent	1 8 000	
Water Droplets Present?		
NO DYES If YES, droplet plume is DAttached Detached	1 9 00	O(O)
At what point in the plume was opacity determined?		10101
TODOF WEST STACK	H.S.E	
Describe Background (i.e. blue sky, trees, etc.) Reckground Color Sky WAITE CAPS Background Color Sky Conditions		
RIVE SKY-WHITE CLOS	See also de de la	
Background Color Sky Conditions		
15/116-WHITE SCAFFERED		
Wind Speed Wind Direction		
mph (provide from/to, i.e. from North to South)		
12-7 S-N		
Ambient Temperature Relative Humidity		
*F	COLUMN TO SERVICE	
Additional Comments/Information:		
Additional Comments into manual.	1.00	
		A STANDARD STANDARD
	19 5 6 6	The state of the s
	500000000000000000000000000000000000000	Contract Contract
Stack SOURCE LAYOUT SKETCH	2013	
with O Draw Arrow in	Average 10-Minute Opacit	
Emission North Direction		Min. Max.
Sun Point	\cup	
	OBSERVER (please print)	
$Wind \longrightarrow X$	Marmer	Title
	I HOWARD PACHE	CA ODE-ROTOR
	Signature PACH	Date
	1	
	Observer Organization	
	KSL - UD	va C
1	anisathi Up	
OBSERVED S POSITION	Certified by /	Certification Date
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Los Alomos LOS	ALAMOS NATIONAL	LABORATO	RY (LA	INL	1			
	EMISSION OBSERVA							
Source Name:	^	Observation Da		T	Start	Time	End?	1 e
BOILER #	WIESEL FUEL	1-//-	07		(/)	22	- 11	31
Source Location:	2.	Sec						
TA3 SM 22 10W	Control Equipment	Min	0	15	30	45	Con	nments
		1	0		0	0		
Describe Emission Point (Top of stack, etc.)	V s	2	0	1	0			
TOD OF WEST	STALL			<u> </u>		4		
Height Above Ground Level Height R	elative to Observer	3	$ \Delta $	2	0	0		
	70 Feet of Source From Observer	4	0	0	(F)		ĺ	
	of Source From Observer	5		1				
72 Yards 5	· E ·	3	1		\subseteq	2		
Description of Plume (stack exit only)	Do	6	0		0	0	ļ	
OLofting OTrapping OLooping OFm	ging months	7	0	0	1			
Emission Color Plume Type	No Phame Present Fugitive Clintermittent			\mathcal{L}	\leq			
LIONE	Fugitive Cintermittent	8	0	\subseteq	\bigcirc	0		
Water Droplets Present?	tached Detached	9	0	7	0	(
At what point in the plume was opacity deter		10		7		\sim	<u> </u>	
		10	$ \mathcal{O} $	\subseteq			3 (2) (2)	
Describe Hickground (i.e. blue sky, trees, etc.	·)	9-9115	344				Harry	可吸收
			1.35					
Blut Sky - WH Bedground Color Blut - WHITE Sky Con	ditions		建	ST ST	*C.3*	Tree of	30 S	
Wind Speed Wind Direction	CATTERED		mari.	40.59	7.7	44.2	4.7/14	的知识 "
	. from North to South)	- AC	性性		1 1		100	
12-7 $1.5.4$	(E.F.	Sec. 4.		250	7707	4.6
Ambient Temperature Relative	Humi dity %							t .
	70	1.= 1 6. 6.*	100	124	医 遗	1000-	45	terior est
Additional Comments/Information:		172	100			2.0	2.3	
BOILER STABLE - STOP	PED TAKING KENDUG		400		As a		443	
BUT STAYED OUT OB	SERVING	1200	graph.	*44	1	20	LE: 0	relative
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Stack SOURCE LAYOU	TCVETCU	20			720		387 3	Villa i la rockio v A
with Q	Draw Arrow in	1.5 /144 /25 - 25 . 144 254			4	17		
Plume	North Direction	Average 10-N	Amute O	pacity		Kange Min.		Readings
Sun Point			ン			_	2	\mathcal{L}
Wind —	~ 27	OBSERVER	(please p	rint)				
		Name:	يئي.) ~/*/	٠	Title:		فسسه
(] (Signature,		CHE	res.		Date	FTOR
• ('' 1			,			l	
	<i>[</i>	7	<u> </u>				11-11	1-07
		Observer On			., <			
1	AT IT AND IN COURT OF I	PES C	- 2	11			T Comité :	ation Date
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S	TARABATARU (FANT)	
Los Alamos LOS ALAMOS NATIONAL I	LABURATURY (LAINL)	
VISIBLE EMISSION OBSERVA		
Source Name:		. \
BOILER # DIESEL FUEL	1-11-07 121/ 1224	
Source Location:	Sec	
TA3 SM-22 DOWER DLANT	Min 0 15 30 45 Commen	nts
TA3 SM-22 DWH DAVT Type of Source Type of Control Equipment	$\begin{bmatrix} 1 & 0 & 0 & 0 \end{bmatrix}$	1
Dissel Fire NA	10000	
Describe Emission Point (Top of stack, etc.)	1 2 (()(()(()	- 1
To 0 F WEST TACK Height Above Ground Level Height Relative to Observer	1 3 O O O O	
Height Above Ground Level 170 Feet	4 0000	ı
Distance From Observer Direction of Source From Observer	10000	
Distance From Observer Pards Direction of Source From Observer		
Description of Plume (stack exit only)		I
CLofting CTrapping CLooping CFanning Coning		
☐No Plume Present Emission Color Plume Type ☐No Plume Present	7 7000	1
Continues DEscriber Platomittent	8 000 190 100 17	1-06
Water Droplets Present? ZNO □YES If YES, droplet plume is □Attached □Detached	9 100 100 100	I
· · · · · · · · · · · · · · · · · · ·		
At what point in the plume was opacity determined?	10 100 100 25 5	1
TODOF WEST STACK		
Describe Background (i.e. blue sky, trees, etc.)		
Background Color Sky Conditions	12	
Background Color Sky Conditions		// eq
KINE CLEAR	13	
Wind Speed Wind Direction		
mph (provide from/to, i.e. from North to South)	14	
12-1 S N	15	
Ambient Temperature Relative Humi dity	15	
°F %	16	***
Additional Comments Information: AIR TO CASCARCE FROM MANUAL		
A. T. Car Swelly to Am	17	-
MILLOCASCAPE		
YRON MANUAL	\$9%3	*
(OIL VALUE STUCK)		1
Stack SOURCE LAYOUT SKETCH	20	
with Draw Arrow in	Average O-Moule Opacity Range of Opacity Rea	adines
Plume North Direction	Min. Max.	
Sun Point	11 19.37 (MM) () /	<i>(60)</i>
	OBSERVER (please print)	
$ W_{ind} \rightarrow $	Title:	
	Signature Date	TOR
	Signature Date	
	Signature PACHECO OPERAS 1-11-0	
	1-11-0	0/
	Observer Organization	
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OBSERVER'S POSITION	Certified by Certification	n Date
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4		_						
	LOS ALAMOS NATIONAL							
	IBLE EMISSION OBSERVA			MINU	ITE)			
Source Name:		Observation D	ale		Start '	Time	En	d Time
BOILER # 1 DIE	sec Fuel	1-11-0	フ		/ /2	1-6	,	130
Source Location:		Sec	T			<u> </u>		
TA 3 5M 22 20	Type of Control Equipment	Min	0	15	3.0	45	C	omments
Type of Source	Type of Control Equipment	1 1	0	0	2	1]	
DIESEL FUEL	NA	<u> </u>	0	14	0	U,	ļ	
Describe Emission Point (Top of stack	r, etc.)	2	10	0	0	0		
TOP OF WE	ST STACK	3	1		1			
	eight Relative to Observer]	U	LU_	\cup			***************************************
150 Feet	170 Feet	4		0	(2)	(
Distance From Observer Di	rection of Source From Observer		\sim					
72 1405	SE	5	()	0	U	0		*****
Description of Plume (stack exit only)		1 6	0		1			
On Plume Present	□Fanning □Coning		V	<u> </u>	7	$\overline{\mathcal{L}}$	<u> </u>	
Emission Color Plume Type	ZNo Plume Present	7	$C_{\mathcal{I}}$	\mathcal{O}	\bigcirc	\bigcirc		
NONE Continuous	☐ Fugitive ☐ Intermittent	8			\wedge	\wedge		
Water Droplets Present?		 	رب	\sim	4	2		
ZNO TYES If YES, droplet plume i	s □Attached □Detached	9	0	(')	()	()		
At what point in the plume was opacity	determined?	10	$\overline{\Delta}$	1	$\overline{\Delta}$	-		
102 of WEST	STACK	l -	V.			\mathcal{C}	28 1	
Describe Background (i.e. blue sky, tre		雅 14		***	9			% .
Blue Sky		12	12		物框			- 3
Background Color Sky	y Conditions	112	(4)				- 64	* Any
Wind Speed Wind Direction	CLEAR	13		- PA			The state of	-
	na /to, i.e. from North to South)	-	a and	7			45350g. v	
2-1 5-	M	14			Yaciro			
Ambient Temperature Re	lative Humidity	15					ï	
°F	%							
Additional Comments/Information:		16	-	4	11	1	Sec. ing	**************************************
		* 17 ···		- 74		Serve		***
<u> </u>		***************************************	Edin.	2 Y				tre-se-
		18			No Marie			#.
		19		N.H.				
					- 1			
Stack SOURCE LAY	YOUT SKETCH	20	1		,	-		and the second
Plume	Draw Arrow in	Average 10-M	imute (pacity	I	cange o	f Opac	ity Readings
Sun Denint		II /	١		1	viin.	7	Max.
Sun Point	$\langle \rangle \langle \rangle \langle \rangle$	ODER TO SEE	/					
Wind — (X		OBSERVER Name:	(please	Brunt)		Title:		
	1 M	Contain	n F	Lar i	1200	Tiuc.	00	ERATOR
) (1	Signature	1	7 5	/ 		Date	Cry//Di
	7		11.					
	/ 1		ter				1-1	1-07
1		Observer Org						
	İ	Certified by	-Up	125				
1	OBSERVER'S POSITION	Certified by		7			Certif	cation Date
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1			<u> </u> /ጟͰ				<u> </u>	-06
SUN LA CATIO	ON LINE							

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	Los Alamos LOS ALAMOS NATIONAL I	LA	BORATOI	RY (L	ANL)			
	VISIBLE EMISSION OBSERVA	TI	ON FORM	(10 N	MINU	TE)			
1	Source Name:	1	Observation Da	e		Start 7	lime	End Time	
1	BOILER #1 DIESEL FUEL	П	1-11	-07)	17	131	124	110
ł	Source Location	1 6				/ 4			$1 \cup 1$
1	5M 20 0. 1.2 3/4/17	Ш,	Sec	0	15	30	45	Commen	
- 1	TA 3 5M 22 POWER PLANT Type of Source Type of Control Equipment	Į Į-	MIN		1.7	30	45	Comme	185
- 1	Type of Source Type of Control Equipment	Ш	1	()	\bigcirc				
١	1116SEL TUEL NA	1			\sim	\sim	~_	-	
ı	Describe Emission Point (Top of stack, etc.)	11	2	(2)	$\langle \gamma \rangle$	()	0		ļ
İ	TOD OF WEST STACK	IF		\sim	\sim				1
Ì	Height Above Ground Level Height Relative to Observer	11	3	\mathcal{O}	0	0	0		I
- 1	Feet 77 Feet		4		\sim	~	•		
- [11	4		\mathcal{O}	\mathcal{O}	()		
	Distance From Observer Direction of Source From Observer		5			1	m		
- 1	72 Yerds 5 E		٠,			\cup	\cup		
-	Description of Plume (stack exit only)	11	6	1	\bigcirc	1	1		
1	□Lofting □Trapping □Looping □Fanning □Coning	\vdash		<u> </u>	<u> </u>	<u> </u>	\sim		
لر	Ano Plume Present	11	7	1	1	0			l
	Emission Color Plume Type No Plume Present	1 -		_					
ļ	Nont		8	0	0	0			
Ì	Water Droplets Present?	1 1-				_	~		
J	NO DYES If YES, droplet plume is DAttached Detached	H	9		O	(7)	\mathcal{O}		
	At what point in the plume was opacity determined?	1 [10	0		$\overline{\Delta}$	1		
Ì		IL	10		0	0	U		
ı	TOP OF WEST STACK	∤ ^	11	245		***	Sales Sales	ndir _{ne} .	
١	Describe Background (i.e. blue sky, trees, etc.)	_		~*	·	<u> </u>	ļ	782	
	BLUE-SKY	H	12] :		
	Background Color Sky Conditions	I⊢					-	-62	
1	BLUE CLEAR	11.	,13 °	and the state	h , %		ļ., ;	-	
- 1	Wind Speed Wind Direction (provide from/to, i.e. from North to South)	۱H		45 Jan				enest.	
ļ		ľ	L≱			Stepping Section	1	*	
1	2 ·	┇┞	15		7.			F	The Contract
-	Ambient Temperature Relative Humidity	۱L	12 👙		*			Marie,	
- 1	· °F	П	16 🖣 🖁				1		
ļ	Additional Comments/Information:	1 ⊦					<u> </u>	<i>Ma</i>	100
1		1	17*			}	1		19
		75	East .	Service Comp	- *	100	Cong ray . and .		
		Ш	18						
-			19 *	*			1	уж.:	
-		J L	19		:	l			
ı	Stack SOURCE LAYOUT SKETCH	۱Г	2₫	A.				- 1980°	**
-	with ()	١L	34.E.	<u> </u>		<u> </u>	<u> </u>	L	
	Plume Draw Arrow in	4	Average 10-M	linute (Opacity			of Opacity Re	
- 1	Emission North Direction	П)	1	Min.	Max.	
	Sun Point	1			, 			<u> </u>	\sim
	$w_{ind} \longrightarrow X$		OBSERVER	please	print)				
			Name:				Title:		•
	17 / M	He	Signature	KP_	[AC	460	0	Date Date	UK
	i	11:	Signature			$\overline{}$		Date	
		Ш		1				1-11-0	~
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		11'	Observer Org	anızatı	on	_			
i			KSI	_	UD	25	2		
	OBSERVER'S POSITION		Certified by		-//	<i></i>	***************************************	Certification	n Date
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į	1409		5	4				0-0	か
l	*								

6.	
Los Alamos LOS ALAMOS NATIONAL	LABORATORY (LANL)
Source Name:	ATION FORM (10 MINUTE)
Source Location:	1-11-07 1246 1256
-1 3 SAM 22 DU 42 DIANT	Sec Min 0 15 30 45 Comments
TA 3 SM-22 DOWGE PLANT Type of Source Type of Control Equipment	
DIESEL FUEL NA	
Describe Emission Point (Top of stack, etc.)	2 0000
TOD OF WEST STACK	
Height Above Ground Level Height Relative to Observer	$1 \frac{3}{2} \frac{ \mathcal{O} \mathcal{O} \mathcal{O} \mathcal{O} \mathcal{O} \mathcal{O} \mathcal{O} O$
150 Feet 170 Feet	4 0 00 0
Distance From Observer Direction of Source From Observer	
72 Yards $5/=$	5 0000
Description of Plume (stack exit only)	6 0000
□Lofting □Trapping □Looping □Fanning □Coning	
Emission Color Plume Type CNo Plume Present	1 0000
NONE Continuous Cl Fugitive Clintermittent	8 0000
Water Droplets Present?	
□NO □YES If YES, droplet plume is □Attached □Detached	11 9 0000
At what point in the plume was opacity determined?	10 0 0 0
TOD OF WEST STACK	
Describe Background (i.e. blue sky, trees, etc.)	11.
Buck Sky Background Color Sky Conditions	Ĭ 2
Background Color Sky Conditions CLEAR	
BLUG CLAR Wind Speed Wind Direction	13
mph (provide from/to, i.e. from North to South)	4
12-7 W-E	
Ambient Temperature Relative Humidity	15 15
°F 9€	16
Additional Comments/Information:	
Beinging up loss on # 1 Borger	17
1	18
1247	
	19
Stack SOURCE LAYOUT SKETCH	20
with Plume Draw Arrow in	
Emission North Direction	Average 10-Minute Opacity Range of Opacity Readings Min. Max.
Sun Point	
$ W_{ind} \rightarrow $ $\langle X \rangle \langle Y \rangle $	OBSERVER (please primi)
	Name: Title:
	Signature Date
[1-11-07
1 4	Observer Organization
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OBSERVER'S POSITION	Certified by Certification Date
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	Αl			MINU				
Source Name:		Observation Da	te		Start 7	Ilme	End Time	
KOUGE # 1) (ESEL # FUEL	CESE		1301					
Source Location:	1							
To 3 SM 22 DAVER DIA. T			0	15	30	45	Comment	.8
Type of Source Type of Control Equipment	1	····	λ	~	<u> </u>	\sim		
	ı	1	U	0		\mathcal{O}		
DIESEC FUEL NO	4	2	1	Ω		\mathcal{C}		
Describe Emission Point (Top of stack, etc.)		<i>L</i>	~	U	\mathcal{L}	\mathcal{L}		
	_	3		$\langle \gamma \rangle$	1	1		
	1		\checkmark	~	\prec	~		******
150 Feet 170 Feet		4	()	(()	\mathcal{O}		
			~	\sim	8			
72 Yards $5 \in$		5	()	0	\mathcal{O}			
Description of Plume (stack exil only)	1	6						
		<u> </u>						
INo Plume Present	1	7						
Now Continuous Fugitive Lintermuttent		8						
Water Droplets Present?	1							
ZINO DYES If YES, droplet plume is DAttached Detached		9						
At what point in the plume was opacity determined?	1	10						
TOO OF WEST STACK			3	- C.S				
Describe Background (i.e. blue sky, trees, etc.)	1	1 h	ių,			١	***	1
BLUE SKY				4			•	
	1	#1.2	P .	₩.		- .	<u> </u>	
		** 12 %	⁰ 1		190		*	
Wind Speed Wind Direction -	1	4.3		***			7/4	
mph (provide from/to, i.e. from North to South)		14						Aug.
$12.7 \mathcal{W}_{-} \mathcal{L}$	П						*	1
	1	13	, , ,	٧.				· ' ' '
°F %		46	, "				9 . × •	
Additional Comments/Information:	1	*		×is.		~~~~~	s	· · · · · · · · · · · · · · · · · · ·
13 AL OFF SE THE ALL		17		***		Object Control	We y	
1301 of the fool oil			38 -		Page 1		.52	4
		18 %	i i	1			4	1973
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	П	20*************************************	-	300 E.	Mar. 19	``	,	1
with Draw Arrow in			inute (Doacity			f Opacity Read	ings
North Direction		>					Max.	~\
Sun Point)		ļ	- (ノ
Wind - X			please	print)				
wind 3		Name:		D.	-	Title:	_	_
	П	CONGR	21	ACI	4€cc)	Opera?	OK
_		Signature	, ´	`) <i>/</i>	•		Date	
	П						1-11-07)
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_	11	Jusava Urg			_			
		1.56		00.	<u> レン</u>	W*		
OBSERVER'S POSITION		Certified by		17			Certification I	Date
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		111					0 00	<u>, </u>
STREET A TRONE FINE	1							

· Los Alamos NATIONAL I	ABORATO	RY (L	ANL)		
VISIBLE EMISSION OBSERVA			MINU	Start	Time	End Time
Fuel OIL # 1 Boiler	Observation Do			SIMI!	· 1	11:40
Fuel OIL # / Boiler	Sec		 -	14		
Source Location: TA 3 SM 22 POWER Plant Type of Source Type of Control Equipment Fue OIL N/A Describe Emission Point (Top of stack, etc.)	Min	0	15_	30	45	Comments
Type of Source Type of Control Equipment	1	0	D	0	0	#4 Burnol
Pue OIL N/A Describe Emission Point (Top of stack, etc.)	2	0	Ö	0	0	
Top of Stack		· 		T		
Height Above Ground Level Height Relative to Observer	3	0	\cup	0	0	
150 Feet 170 Feet	4	0	0	0	0	
Distance From Observer Direction of Source From Observer	5	0	0	0	0	
Description of Plume (stack exit only)	6	0		D	0	
Monthing □Trapping □Looping □Fanning □Coning □No Plume Present	7				t - 1	
Emission Color Plume Type No Plume Present		\downarrow O	0	0	0	
Black Continuous Drugitive Matermittent	8	O	0	10	0	
Water Droplets Present? ZNO □YES If YES, droplet plume is □Attached □Detached	9	0	0	0	0	
At what point in the plume was opacity determined?	10	0	0	0	0	
Describe Background (i.e. blue sky, trees, etc.)		# : / La 2	18-72	tigar.	S 1	
Blue Sky			7/22			
Background Color Sky Conditions					7.50	
Wind Speed Wind Direction						
0-5 mph (provide from/to, i.e. from North to South)		4.2		16 A		Alberta de la Salada de La Calada
Ambient Temperature Relative Humidity				*		
N/A °F N/A %	V 3				and the same of the	
Additional Comments/Information:			1		1	
	To the second			200 m		
			35%		7/2	
	C-12, 5		196		14	
Stack SOURCE LAYOUT SKETCH	n in		real Share A	e total succession	13.5	
with Draw Arrow in North Direction	Average 10-1					of Opacity Readings
Sun Point	0	0)	%	-	Min. C	D. O Max. O.O
Wind -X	OBSERVER					Maint.
	Name: BR	141	0	2712	1 1Ue:	Maint. Lead MAN
	Signature_		7)		Date
	1 Frus	ul	X	,		1-25-07
	Observer O	ganizat				
OBSERVER'S POSITION	Certified by	1 00				Certification Date
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SUN LOCATION LINE *						

Los Alamos	*:	LOS ALAMO	S NATIONAL	LABORATO	RY (L	ANL)			
Source Name:	V	ISIBLE EMISS	ION OBSERV	Observation Da		MINU	IL) Start	Time	End Time	
Source Location:				Sec Min	0	15	30	45	Comment	
Type of Source		Type of Control Ed	pripment	1	0	0	0	0	Commen	
Describe Emission Point (Top of s	ack, etc.)		2	0	O	0	0		
Height Above Ground Lev		Height Relative to Ob		3	0	0	0	0		
Fee Distance From Observer	er	Direction of Source F	Feet rom Observer	4	0	0	0	0		
Ya				5	0	0	0	0		······
Description of Plume (stace CLofting	ck exit on □Loopin	ly) g OFanning OC	oning	6	0	0	\mathcal{O}	0		
Emission Color P	lume Typ IContinu		sent Intermittent	1 7	0	0	0	0		
Water Droplets Present?	niet niun		etached	8	0	0	0	O		
At what point in the plume			ciacied	10	0	0	0	0		
Describe Background (i.e.	blue sky,	trees, etc.)	·							
		-							\$ 12.00	
Background Color		Sky Conditions								
	ind Dire rovide fr	ction om/to, i.e. from North	to South)							
Ambient Temperature		Relative Humidity	%						7.6	
Additional Comments/Info	rmation:				==				A CONTRACT OF THE PARTY OF THE	
				法修订				i ke		
				3 (2 J 2 J	30,71			4.0		
stack with Plume SOUR	RCE L	AYOUT SKETC	Draw Arrow in	Average 10-M	inute C	pacity		ange o	f Opacity Read	ings
Sun 🕁	Emi: Po		North Direction			,		Ain.	Мах.	
Wind —	2	ζ	\bigcup	OBSERVER (Name:	please	print)		Title:	A STATE OF THE STA	
	To the state of th			Signature					Date	

OBSERVER'S POSITION

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Certification Date

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LOS ALAMOS NATIONAL LABORATORY (LANL)

Los Alamos	ν	ISIBLE EMISSI	ON OBSERVA	ATION FORM	И (10 I	MINU	TE)			
Source Name:				Observation D	ate		Start 7	nme	End Time	(
									11:4	<u>U</u>
Source Location:	*	•	,	Min	0	15	30	45	Comme	nts
Type of Source		Type of Control Eq	pui prinent	1	0	0	0	0		
Describe Emission	Point (Top of s	tack, etc.)		2	0	0	0	0		
Height Above Gro	und Level	Height Relative to Ob	server Feet	3	0	0	0	D		
Distance From Ob	Feet	Direction of Source F		4	$\downarrow O$	0	0	0		
Distance rion ou	Yards	Direction of Bodies 1		5	0	0	0	0		
Description of Plus	me (stack exit o oping DLoopi	nly) ng Ofanning OC	oning	6	10	0	0	0		
□No Plume Prese Emission Color			esent	1 7	0	0	0	0		
	□ Contin		Cantermittent	8	0	0	0	0		
Water Droplets Pro	esent? YES, droplet plu	me is □Attached □I	Detached	9	0	0	0	0		L
At what point in th	ie płume was of	eacity determined?		10	Q	0	0	0	Landin	A 40 Y 2 Y 3 Y 3 Y 3 Y 3 Y 3 Y 3 Y 3 Y 3 Y 3
Describe Backgrou	ınd (i.e. blue sk	y, trees, etc.)							1521/0	<u>L</u>
Background Color		Sky Conditions			il sa Ngan	e esta	10.00 10.0000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.0000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.0000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.0000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.0000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.0000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.0000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.0000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.0000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.0000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.0000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.0000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.0000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.0000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.0000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.0000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.0000 10.000	10 pe 1		e of the
Wind Speed mpl	Wind Dir (provide	rection from/to, i.e. from North	to South)					2.5		
Ambient Tempera	ture °F	Relative Humidity	%							
Additional Comm	ents/Information	1:								
				19.						
Stack	SOURCE	LAYOUT SKET	CH	1		944		3		
with O Plume	Er	nission Point	Draw Arrow in North Direction	Average 10	Minute	Range of Opacity Readings Min. Max.				
Sun Wind -		X	\bigcup	OBSERVE Name:	R (pleas	Tille	-			
				Signature					Date	
				Observer C	rganizal	ion				
		OBSERVER'S PO	SITION	Certified by					Certification	on Date
				 						
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LOS ALAMOS NATIONAL	LLABORATORY (LANL)
VISIBLE EMISSION OBSERV	VATION FORM (10 MINUTE)
Source Name:	Observation Date Start Time End Time
Fuel 01/#/ BoileR	1-25-07 11:48 11:58
TA 3 5M 22 POWER Plant Type of Source Type of Control Equipment	
Type of Source Type of Control Equipment	1 0 0 0
Fuel oil N/A	
Describe Emission Point (Top of stack, etc.)	
Height Above Ground Level Height Relative to Observer	1 3 0000
150 Feet 170 Feet	4 0 0 0
Distance From Observer Direction of Source From Observer	
250 Et NE	5 0000
Description of Plume (stack exit only) Trofting Trapping Looping Tranning Coning	
□No Plume Present	7 0 0 0 0
Emission Color Plume Type INo Plume Present Intermittent I	
(5/ack Continuous Fugitive Matermittent	8 0000
ENO □YES If YES, droplet plume is □Attached □Detached	9 0 0 0
At what point in the plume was opacity determined? ANICOX. 1 Foot Above Stack	10 0000
Describe Background (i.e. blue sky, trees, etc.)	
Backgroupd Color Sky Conditions	
Wind Speed Wind Direction	
mph (provide from/to, i.e. from North to South)	
0-5 From NE to SW	
Ambi ent Temperature Relative Humi dity	
Additional Comments/Information:	
Addition Communication and additional additional and additional additional additional and additional	
Stack SOURCE LAYOUT SKETCH	
with Plume Draw Arrow in	Average 10-Minute Opacity Range of Opacity Reading
Sun Direction Sun Point North Direction	Min. O. O Max. O.
	OBSERVER (please print)
Wind -	Title MAINT
	BRIAN OLTIZ head MAN
	Signature Date
	Chan 1/25/C
	Observer Organization KSL
OBSERVER'S POSITION	Certified by Certification Date
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	1 1 0/29/UE
SUN LOCATION LINE	•

LOS ALAMOS NATIONAL LABORATORY (LANL)								
VISIBLE EMISSION OBSERV.								
Source Name: #2 Boiler	Observation Date Start Time End Time							
Fueloil 2 Boiler	2-8-2007 11:12 11:22							
TA3 SM22 Power Plant	Min 0 15 30 45 Comments							
Type of Source Type of Control Equipment	1 0 0 0 138 0							
tuel oil None	1 0 0 0 0 -3 Datable							
Describe Emission Point (Top of stack, etc.)								
Total Stack	3 0000							
Height Above Ground Level Height Relative to Observer	4 0 0 0 0							
Distance From Observer Direction of Source From Observer								
97 Yards NE	5 0000							
Description of Plume (stack exit only) SLofting	6 0000							
☐No Plume Present	7 0 0 0 0							
Emission Color Plume Type								
Black DContinuous DFugitive Skatermittent Water Droplets Present?	8 0000							
MO DYES If YES, droplet plume is DAttached Detached	9 0000							
At what point in the plume was opacity determined? ONE FOOT ABOVE BIACK	10 0000							
Describe Background (i.e. blue sky, trees, etc.)								
Blue SKY	12							
Background Color Sky Conditions Blue Clear								
Wind Speed Wind Direction								
0-3 mph (provide from/to, i.e. from North to South)	14							
FROM SE TO NW	15							
Ambient Temperature Relative Humidity 19.9 °F 38 %								
Additional Comments/Information:	16 2 3							
	17.							
	18							
	19							
Stack SOURCE LAYOUT SKETCH	20							
with O Plume 1 Draw Arrow in	The second of th							
Emission North Direction	Average 10-Minute Opacity Average 10-Minute Opacity Range of Opacity Readings Min. O. O Max. O. O							
Sun \bigoplus Polint	0.0 /0 0.0 0.0							
$ W_{\text{ind}} \rightarrow $	OBSERVER (please print) Name: Bl. A.) Orm Title: head Mai N7.							
-1	DEIAN OUR Man							
	Signature Date							
	Buan D 2-8-07							
	Observer Organization							
	ASL							
OBSERVER'S POSITION	Certified by Certification Date							
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Los Alamos	LOS ALAMOS NATIONAL VISIBLE EMISSION OBSERV.							
Charles Company of the Company	VISIBLE EMISSION OBSERVE	Observation Da		Start	Time	End T	îme	
Source Name: Fue oi 1#2	Boiler	2-8.				22	11	:32
	2 Power Plant	Sec Min	0	15	30	45	Con	nments
Type of Source	Type of Control Equipment	1	0	0	0	0		
Fuel 01 Describe Emission Point (Top of	stack, etc.)	2	0	0	0	0		
Topof 5	tack	3						
Height Above Ground Level	Height Relative to Observer	4	0	0	0	0		
Distance From Observer 97 Yards	Direction of Source From Observer	5	0	0	O	0		
Description of Plume (stack exit	only)	6	0	0	0	0		
□No Plume Present		 	0	0	0	0		
Black Contin		8	0	0	0	0		
Water Droplets Present?	ume is DAttached DDetached	9	0	0	0	0		
At what point in the plume was o	pacity determined?	10	0	0	0	0		
Describe Background (i.e. blue si	Above Stack	$ \mathbf{\hat{n}}$		4.00	130			The state of
Blue S SK						1 7 A A		
Background Color	Sky Conditions	12:3						
Wind Speed Wind Di		14			1200			
	on SE tO NW	Company to the company of the compan	1.5		1.00 1.00 1.00	sak ii		
Ambient Temperature	Relative Humi dity	15	e oktorila Terreta	es e	4-18	A 45 3 55 6		
19.9 °F	.30	16		3.5	(A-2)	10-10	6.4.4	
Additical Comments/Information	Ω:	100		āi.	Œir.	美術	F	以 以
		18						4.50.727 4.50.727
		19		ACSESS TO	Mark.	2.7		
	LAYOUT SKETCH	205	4 45 A	34.46 200.46	(4) (4) (4) (4) (4) (4) (4) (4) (4) (4)			
with Plume	Draw Arrow in North Direction	Average 10-1	/inute	Opacity				y Readings
	nission Point	0.	0%	,		Min O	7)	Nax. O.O
Wind —		OBSERVER Name: 2	(please	print)	······	Title	Lead	Maint
	4	Signature	1111		11/2		Man)
		Bui	ru i	6	1			8-07
		Observer On	ganizat S 2					
	OBSERVER'S POSITION	Certified by					Certific	ation Date
	140°	ET	A				8/20	9/06

SUN LOCATION LINE

Los Alamos VISIBLE EMISSION OBSERV	
	Observation Date Start Time End Time
Fueloil #2 Boiler	2-8-07 11:32 11:42
Source Namey Fuel 01 #2 Boiler Source Location: TA3 SM22 Power Plant	Min 0 15 30 45 Comments
Type of Source, Type of Control Equipment Full 0// NONE	1 0000
Describe Emission Point (Top of stack, etc.)	1 2 0000
Tofot Stack Height Above Ground Level Height Relative to Observer	3 0000
150 Feet 100 Feet	4 0000
Distance From Observer 97 Yards Direction of Source From Observer	5 0000
Description of Plume (stack exit only) Afterning Trapping Theoping Tranning Coning	6 0000
□No Plume Present Emission Color Plume Type □No Plume Present	7 0000
Black Continuous Drugitive Matermittent	8 0 0 0 0
Water Droplets Present? ☐NO □YES If YES, droplet plume is □Attached □Detached	90000
At what point in the plume was opacity determined?	10 0 0 0 0
Describe Background (i.e. blue sky, trees, etc.)	
Blue Sky	
Background (i.e. blue sky, trees, etc.) Blue Sky Background Color Sky Conditions Wind Speed Wind Direction	132
Amounted from the Land Mark Andrew Mark	14
FROM SE to NW	
Ambient Temperature Relative Humidity 19. 9 °F 3 8 %	15 16
Additional Comments/Information;	
	18
Stack SOURCE LAYOUT SKETCH	19
with Plume 7 Draw Arrow in	Average 10-Minute Opacity Range of Opacity Readings
Emission North Direction	O. O Max. O. C
Wind -3	OBSERVER (please print) Name: BLAN OLTIZ Title: Man
	Signature Date 3-8-07
	Observer Organization
OBSERVER'S POSITION	Certified by Certification Date
140°	
0	E1A 8-29-06
SUN LOCATION LINE	



Source Name:		Observation Date			Start 7	lime	End Time
Power Plant at TA-3		2/22/	07	7 10:37		10:37 10:	
Source Location: TA-3-22		Sec	0	15	30	45	Comments
Type of Source Type of Control Equipment Fue 011 No Particulate Control		1	0	0	0	0	*BBarrek
Describe Emission Point (Top of stack, etc.)	- -	2	0	\Diamond	0	O	
TODOF Most West Stack	J	3					
Height Above Ground Level Height Relative to Observer			0	0	$\stackrel{\sim}{\circ}$		
Distance From Observer Direction of Source From Observer		4	0	\mathcal{O}	\cup	<u>U</u>	
250 Feet NW		5	0	0	0	0	
Description of Plume (stack exit only) □Lofting □Trapping □Looping □Fanning □Coning	-	6	Ò	0	0	0	
Emission Color Plume Type No Plume Present	-	7	0	0	0	0	
Black Continuous Fugitive Intermittent		8	0	0	0	0	V ************************************
Water Droplets Present? ▼NO □YES If YES, droplet plume is □Attached □Detached		9	0	0	0	0	
At what point in the plume was opacity determined? ONC FOOT Aboue Stack	1	10	0	0	0	0	
Describe Background (i.e. blue sky, trees, etc.)	1	11			***************************************		
Partly Cloudy 5 kies	4[12					Marian and the same of the sam
Background Color Bluesky white Clouds Partly Cloudy Wind Speed Wind Direction		13					
mph (provide from/to, i.e. from North to South)		14					
0-3 From N to S From StoN	↓	15				†	
Ambient Temperature Relative Humidity 42 °F 45 %		16				<u> </u>	
Additional Comments/Information:	┨├─						
	11-	17			<u> </u>		
		18			ļ	-	
	4 L	19					
Stack with SOURCE LAYOUT SKETCH		20	***************************************			-	
Plume Draw Arrow in North Direction	Av	erage 10-M		-		•	of Opacity Readings
Sun Doint Point	0.0% MIN. 0.0 MAX						
Wind -	OBSERVER (please print) Name: O				Maint Leadman		
	Signature Date 2/22/6					Date 2/22/07	
	Observer Organization KSL						
OBSERVER'S POSITION	Cer	rtified by	<u> </u>		LT -LV-A-MANINET		Certification Date
140°		ET	A				8/29/06
SUN LOCATION LINE							



Source Name:	Observation D	Start	Time	End Time	
Power Plant at TA-3	2/28	2/28/0/		47	10:57
Source Location: TA-3-22	Sec Min	0 1	5 30	45	Comments
Type of Source Type of Control Equipment	1	01		0	
Fuel oil No Particulate Control	 	1016			
Describe Emission Point (Top of stack, etc.)] 2	10 6	<u>ں ر</u>	$ \mathcal{O} $	
Tolof Most Western Stack Height Above Ground Level Height Relative to Observer	3	00	10		
	4				
150 Feet 170 Feet Distance From Observer Direction of Source From Observer	1		기 <u>이</u>	40	
East	5	101		0	
Description of Plume (stack exit only)	6	00			
□Lofting □Trapping □Looping □Fanning □Coning No Plume Present	J - 7			0	
Emission Color Plume Type No Plume Present	I	1016	40	+=-+	
Black Continuous Grugitive GIntermittent	8	00	2 O	0	
Water Droplets Present? ▼INO □YES If YES, droplet plume is □Attached □Detached	9	00	20	0	
At what point in the plume was opacity determined?	10	0 0	0 (0	
Describe Background (i.e. blue sky, trees, etc.)	11				
Partly Cloudy Skies	12				
Partly Cloudy Skies Background Color, Sky Conditions Blue / Whit Partly Cloudy	13				
Wind Speed Wind Direction (provide from/to i.e. from North to South)	14		1		
0-3 From 5 to N					
Ambient Temperature Relative Humidity	15		-		
42° °F 45%0 %	16				
Additional Comments/Information:	17				
	18				
	19				
Stack SOURCE LAYOUT SKETCH	20				
with Oraw Arrow in Plume North Direction	Average 10-	Minute Opa	acity	_	of Opacity Readings
Emission	11 0.	0%		Min.	.0 Max.
Sun Poin (7)	OBSERVER		int)		mi +
Wind -	Name: Q	Lealman			
I dut,		ZIAN	Jein.	Z	Date
	Signature Date $= \sqrt{22/6}$				
	Observer O	rganization	-		1
		54	,		Lo veni Da
OBSERVER'S POSITION	Certified by	-0			Certification Date
140°	<u> </u>	A			8/29/06

SUN LOCATION LINE



Source Name:	Observation Date		Start Time		End Time	
Power Plant at TA-3	2/22/0/			1/.	:30	11:40
Source Location: TA-3-22		0	15	30	45	Comments
Type of Source / Type of Control Equipment	Min 1	Ŏ		1	5	Put Aik gov Casealp
Fuelo: No Particulate Control			5	5	٦	caseado
Describe Emission Point (Top of stack, etc.)	2	5	15	40	50	
Topof Most wasten Stack Height Above Ground Level Height Relative to Observer	3	30	25	5	0	
150 Feet 1712 Feet	4	0	<u>()</u>	0	ň	
Distance From Observer Direction of Source From Observer	5		<u>~</u>			
250 Feet NW	3	0	0	0	Ŏ	
Description of Plume (stack exit only) Thofting Trapping Theoping Tranning Coning	6	0	0	0	O	***************************************
□No Plume Present Emission Color Plume Type □No Plume Present	7	Ô	\mathcal{O}	0	0	
Black Continuous Fugitive Chatermittent	8	0	0	0	0	
Water Droplets Present? ZNO □YES If YES, droplet plume is □Attached □Detached	9	0	0	0	0	
At what point in the plume was opacity determined?	10	0	0	0	0	
Describe Background (i.e. blue sky, trees, etg.)	11	_				***************************************
PARTLY Cloudy Sties	12		•••••••••••••			
Background Color Sky Conditions Blue white Sky Conditions Wind Speed Wind Direction	13					
Wind Speed Wind Direction mph (provide from/to, i.e. from North to South)						
0-3 From 5 to N	14					
Ambient Temperature Relative Humidity 4/3 °F 4500 %	15		,			
Additional Community Technology	16					\$
Attempted To Put Air on CASCAle Hudto take It off Cause of Smoke	17					
Hudto take Itott Cause of Smoke	18					
	19			·		
Stack with O SOURCE LAYOUT SKETCH	20					
Plume Draw Arrow in North Direction	Average 10-M	inute O	pacity	1		f Opacity Readings
Sun Point	4.6	25%	0		Min. O.	O Max.
Wind —	OBSERVER (please print)					Maint
	Name: BRIAN DATIZ Flands					Head Man)
	Signature	-		$\bar{\mathbb{T}}$		Date
	F)M	nl		$\not \searrow$	<u> </u>	2/20/07
	Observer Orga	inizatio SL	n			
OBSERVER'S POSITION	Certified by					Certification Date
	ETI	7			-	8/29/06
SUN LOCATION LINE				·············	L	<u>, , , , , , , , , , , , , , , , , , , </u>



Source Name:		Observation Date			Start 7		End Time
Power Plan			2/22/07			12	12:22
Source Location:		Sec					
TA-3		Min	0	15	30	45	Comments
Type of Source	Type of Control Equipment No Particulate Control	1	0	0	0	0	Paul Parkakuning
ruel or	1	2		0	0	0	Cascade Mode
Describe Emission Point (Top of sta	st Western Stack				1		CRS CASE PICK
Height Above Ground Level	Height Relative to Observer	3		0	0	0	
Feet Feet	170 Feet	4	0	0	0	0	
Distance From Observer	Direction of Source From Observer		1				
250 Feet	NW	5	10	\cup	10	0	
Description of Plume (stack exit on)	(y)	6	0	0	0	0	
Descripting OTrapping OLooping	g □Fanning □Coning	7		0		0	
Emission Color Plume Typ			\vdash		\vdash	\vdash	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Black Continue	ous	8	0	0	0	5	
Water Droplets Present? ☑NO □YES If YES, droplet plum	ne is 🗆 Attached 🔻 🗆 Detached	9	5	5	5	5	***************************************
At what point in the plume was opar	city determined?	10	5	5	0	0	
1 $\lambda \lambda	+ Abouto Start	11	╁╱╴	 			
Describe Background (i.e. blue sky,	trees, etc.) Kie S Sky Conditions Cloudy ction		-	<u> </u>	1	<u> </u>	
Background Color	Sky Conditions,	12	-	_	<u> </u>	<u> </u>	
GRET	Cloudy	13			4		
mph introvide in	om/to, i.e. from North to South)	14					
0-3	FROM 5to N Relative Humidity	15	 	1	 		
Ambient Temperature	Relative Humidity 45 %		 	<u> </u>	 		
Additional Comments/Information:		16	ļ	ļ	<u> </u>		
Additional Commones information		17					
		18					
		19		T	1		
Stack SOURCE L.	AYOUT SKETCH	20	1	 		1	
with Q	Draw Arrow in	Average 10-N	Ainuta	Oracit	<u> </u>	Pance	of Opacity Readings
Plume	ssign / North Direction	11 ~		-	/_	Min.	Max.
	oint /	f i	875	*	<u> </u>		5 %
Wind -	OBSERVER			~ `\	Tiela	Maint	
**************************************	П	Name: BRIAN CATA Title: Lead on					Leadman
						Date /	
		1 / Sun () 2/22/				2/22/07	
	Observer Or	ganizat	ion			<u> </u>	
	1 1	51					
OBSERVER'S POSITION		Certified by			····		Certification, Date
	40°	E7	A				8/29/01
	<u> </u>						10700
017117004	TION LINE						



Source Name:		Observation Date			Start Time		End Time
Power Plant at TA-3		2/22/07			12	:22	12:32
Source Location:		Sec		1	<u> </u>		
TA-3-22 Type of Source Type of Control Equipment		Min	0	15	30	45	Comments
Fue (0, No Particulate Control		1	0	0	0	0	
Describe Emission Point (Top of stack, etc.)		2	\circ	7	0	0	
Top of Most Wostern St. K	H		\leq		\cup	$\vdash \hookrightarrow \vdash$	
Height Above Ground Level Height Relative to Observer		3	\bigcirc	0	0	0	
150 Feet 170 Feet		4	0	0	\bigcirc	0	
Distance From Observer Feet Direction of Source From Observer **Direction of Sourc		5	0	$\overline{\cap}$	0	\bigcirc	
Description of Plume (stack exit only)		6					
Effecting Trapping Looping Fanning Coning On Plume Present			0	0	\circ	O_{\parallel}	
Emission Color Plume Type No Plume Present		7	0	0	\bigcirc	0	
Black Continuous Fugitive Matermittent		8	5	5	5	0	
Water Droplets Present? →NO □YES If YES, droplet plume is □Attached □Detached		9	0	0	0	0	***************************************
At what point in the plume was opacity determined?		10	0	0	0	0	**************************************
Describe Background (i.e. blue sky, trees, etc.)		11					
Gley Skie S	r	12					
Describe Background (i.e. blue sky, trees, etc.) Gley 5kie 5 Background Color Sky Conditions Gley Wind Direction	ŀ	13					
Wind Speed Wind Direction (provide from/to, i.e. from North to South)	\vdash						
D-7		14					
Ambient Temperature Relative Humidity or %	L	15					**************************************
Additional Comments/Information:	L	16					
	L	17			4		
	Γ	18					
	ſ	19					VIII. 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 -
Stack with SOURCE LAYOUT SKETCH		20					
Plume Draw Arrow in		Average 10-Mi	nute C	pacity	R	ange of (Opacity Readings
Sun Point / North Direction	l	0.37	50	10	N	1in . 0	Max.
Y (1)						maint	
Wind	Name: // Title:				Lendman		
	1	Signature .	717 -		4		
		Jua	al k	发》	-	1-	Date /22 /2 -
	-	Observer Organ					-100/0/
	ľ	KS					
OBSERVER'S POSITION	C	Certified by	****			C	Certification Date
140°		ETA				8	1/29/06
SUN LOCATION LINE	L						/



Source Name:		Observation Date			Start 7	Time	End Time
Power Plan	nt at TA-3	2-20	2-22-07		12	:32	- 12:42
Source Location: TA-3-22		Sec Min	0	15	30	45	Comments
Type of Source	Type of Control Equipment	1		0		0	
Fueloil	No Particulate Control		12	0			
Describe Emission Point (Top of s	tack, etc.)	2	\cup	O	O	0	***************************************
Height Above Ground Level	T Western Stack Height Relative to Observer	3	0	0	0	0	
150 Feet	17 <i>0</i> Feet	4	0	0	0	0	
Distance From Observer	Direction of Source From Observer	5	0	0	0	$\overline{\cap}$	h-14
Description of Plume (stack exit on	.N M						
□Lofting □Trapping □Loopin	ng □Fanning □Coning	6	0	0	0	0	
Emission Color Plume Ty		7	0	0	0	0	
Black Continu	ous	8	0	0	0	0	
Water Droplets Present?	ne is 🗆 Attached 🔻 🗆 Detached	9	0	0	0	0	
At what point in the plume was opa	icity determined?	10	0	0	0	0	
Describe Background (i.e. blue sky	HOUR Stack	11					
Grey S	Kies	12					
Background Color	trees, etc.) Kies Sky Conditions Cloudy	13	<u></u>				
Wind Speed	ction om/to, i.e. from North to South)			<u> </u>			
0-3 mph (provide fi		14					
Ambient Temperature	From 5 to N Relative Humidity	15					
Additional Comments/Information:	45 %	16	-				
Additional Comments/Information.		17					
		18					
		19					
Stack SOURCE L	AYOUT SKETCH	20					
with O Plume	Draw Arrow in	Average 10-M	l linute (l Opacity	<u>. </u>	Range o	lof Opacity Readings
Emi	ssion North Direction	0.0]	Min. O	0,0 Max. 0,0
Wind —		OBSERVER (please print)					M-5.4
Wind		Name: Blikn Ortiz Title: Lendon					10- Louis
		Signature Date				Date	
<u> </u>		1 Duar V			2/22/07		
		Observer Org	anizati	on	<u></u>	· · · · · · · · · · · · · · · · · · ·	
		K	<u> 5 L</u>			······································	
	OBSERVER'S POSITION	Certified by	_				Certification Date
	400	E11	7		•••••••	······································	8/29/06
CIDILOCA	TION LINE						•



Source Name:	I	Observation Date		Start Time		End Time	
Pow er Plant at TA-3		2/22/0	クラ	7	12:46		12:56
Source Location: TA-3-22		Sec	^	3 /**			
		Min	0	15	30	45	Comments
Type of Source Type of Control Equipment No Particulate Control		1	0	0	0	0	Running TOSTS
Describe Emission Point (Top of stack, etc.)	\dashv	2	0	0	0	0	Runing Tosts On Cascade Mode
Topot Most Wastern Stack		3	0		0	0	molo.
Height Above Ground Level Height Relative to Observer		4	_			0	
Distance From Observer Direction of Source From Observer	\dashv		0	2		<u> </u>	
250 Feet NW		5	0	0	0	0	A CONTRACTOR OF THE CONTRACTOR
Description of Plume (strack exit only) □Lofting □Trapping □Looping □Fanning □Coning		6	0	0	0	0	*
Mio Plume Present		7	0			\bigcirc	
Emission Color Plume Type And Plume Present Continuous Fugitive Intermittent		8	0	0	0	0	
Water Droplets Present? ★NO □YES If YES, droplet plume is □Attached □Detached		9	0	0	Ō	0	
At what point in the plume was opacity determined?		10	0	O	0	0	
Describe Background (i.e. blue sky, trees, etc.)		11					
Background Color Sky Conditions		12					
Background Color Sky Conditions		13					
Wind Speed Wind Direction							
0-3 mph (provide from/to, i.e. from North to South)		14					
Ambient Temperature Relative Humidity		15					
45 °F 45 % Additional Comments/In formation:	_	16					
Аданова Сописточнасов.		17					
		18					
		19					
Stack with SOURCE LAYOUT SKETCH		20					
Plume Draw Arrow in North Direction		Average 10-M	inute	Opacity		Range Min.	of Opacity Readings Max.
Sun Point		0.	0%	6			0,0 Max. O.Q
Wind -		OBSERVER (please print) Name: Title:				Maint	
		Name: SLIAN OLIVE Title: Lead				Leadman	
		Signature .		1	X		Date/
	I rian &			2/22/07			
		Observer Org	anizati	on			,
OBSERVER'S POSITION		Certified by	<u> </u>				Certification Date
140°		ETA	7				8/29/06
OF THE LAND AND THE STREET OF		-					19/1



Source Name:		Observation Da	te		Start Time		End Time
Power Pla	ant at TA-3	2-22	-07	7	12.	:56	1:06
Source Location:	-3-22	Sec Min	0	15	30	45	Comments
Type of Source	Type of Control Equipment	1 h			30	70	Commens
Fuel oil	No Particulate Control		0	0	0	\cup	
Describe Emission Point (Top of	stack, etc.)] 2	0	0	0	0	
Topot Most		3	0	0	0	\overline{O}	
Height Above Ground Level	Height Relative to Observer Feet	4				1	
Distance From Observer	Direction of Source From Observer	I 	0		2	19	
250 Feet	NW	5	0	0	0	0	
Description of Plume (stack exited Lofting Trapping Loop	only) ong □Fanning □Coning	6	0	0	0	0	
≱No Plume Present		7	0	0	0	0	
Emission Color Plume T		8	0	0	0	0	
Water Droplets Present?	ume is 🗆 Attached 🔻 🗆 Detached	9	0	0	0	0	34.54
At what point in the plume was o		10	O	0	0	0	
Describe Background (i.e. blue sk	of Abour Stack	11					
GREY	Skie 5 Sky Conditions	12		<u> </u>	<u> </u>		
Background Color	Sky Conditions	13					
Wind Speed / Wind Di mph (provide	rection from/to, i.e. from North to South)	14					
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	on 5 to N	<u> </u>			<u> </u>		
Ambient Temperature	Relative Humidity 45 %	15				ļ	
Additional Comments/Information	<u> </u>	16					
Additional Commonas Información		17		& Option Proposition			
		18					
		19					
Stack SOURCE	LAYOUT SKETCH	20	_			1	
with O Plume	Draw Arrow in North Direction	Average 10-M	inute (Opacity	•		of Opacity Readings
	nission/		0.0			Min. D	$O \stackrel{\text{Max.}}{\longrightarrow} O$
Wind —	4 / (')	OBSERVER (please	print)	L.		11-10-4
***************************************	Π̈́I	Name: SLAN KR Lend Man Signature Date					
		1 + Signe (A) 2/221					2/22/07
		Observer Org		on ′		·	
	OBSERVER'S POSITION	Certified by	50				Certification Date
/		Certified by	2				Conneation Date
	140°	E/F	<i>t</i>			····	0/00/10/0
SINIOC	ATION LINE						



Source Name:	Observation Date				Start	Time Z	End Time 37
Power Plant at TA-3 Boiler ≠2	_	3-6-	ロチ				M 10:49 AM
Source Location: TA-3-22	Mi	Sec	0	15	30	45	Comments
Type of Source 3-4-07 ZF Type of Control Equipment	11***	1	1		0	O	
Fuel est (Royler 2) No Particulate Control	∐		0	0			
Describe Emission Point (Top of stack, etc.)]	2	0	0	0	\circ	
Height Above Ground Level Height Relative to Observer	-	3	B	20	25	30	
Feet 150 Scarry Feet 170		4	25	10	0	0	
Distance From Observer Direction of Source From Observer Feet Feet From Observer From Observer		5	0	O	0	O	
Description of Plume (stack exit only) □Lofting □Trapping □Looping □Fanning □Coning	1	6	0	0	0	O	
□No Plume Present Emission Color, Plume Type □No Plume Present		7	0	0	0	0	
Bluck of Continuous Fugitive Intermittent		8	0	0	0	0	
Water Droplets Present? □NO □YES If YES, droplet plume is □Attached □Detached		9	0	O	0	G	
At what point in the plume was opacity determined?	1	10	0	0	0	0	
Describe Background (i.e. blue sky, trees, etc.)	1	1:1					
Blue Stys & wite Would Background Color Sky Conditions 'se wite Clear		12		-			
		13					
Ambient Temperature or YU wind Direction (provide from/to, i.e. from North to South) From 5E 3-6-07 Relative Humidity % 16		14		:			
Ambient Temperature Relative Humidity -		15		:			:
of 40 % 16 Additional Comments/Information:		16					
Fuel Oil test		17					
		18					
		19					
Stack with SOURCE LAYOUT SKETCH		20					
Plume Draw Arrow in	Ave	rage 10-M	nute C	pacity	P F	lange o	f Opacity Readings
Sun Point North Direction	_	2.5	7	1.78	N	Ain. C	Max. 30
	OBSERVER (please print) Name: Title:						
Wind -							
Wests tast		ature	И.,	\mathcal{U}_{i}	سال		Overities
	Sign	ature /	7/	Q	2	_	Date 3-6-07
	de	and	<u> </u>				3-6-07
	1 .	erver Orga SL	nizatio	m			:
OBSERVER'S POSITION		ified by	·····				Certification Date
140°	Ex	DA					3-1-07
SUN LOCATION LINE							

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,	Los Alamos
	SECTION SECTIONS

Source Name:	Observation Date				Start	Time	End Time
Power Plant at TA-3 ROILE # 2	11	3-6-07			10:	49 AM	1 10:59AM
Source Location: TA-3-22		Sec Min	0	15			-
TA-3-22 Type of Source Type of Control Equipment	┧┠	1		0	30 A	45	Comments
Fuel Oil (Boiler #2) No Particulate Control Describe Emission Point (Top of stack, etc.)	┨├		6	 	0		
Usest Stack	$\ \cdot\ $	2	0	O	0	0	
Height Above Ground Level Height Relative to Observer	1	3	Ò	0	D	0	
Feet (50) Feet 176 Distance From Observer Direction of Source From Observer	$\ \ $	4	8	Ø	0	0	
Distance From Observer Plycards Direction of Source From Observer Feet Gast words 411.07		5	0	0	6	0	
Description of Plume (stack exit only) □Lofting □Trapping □Looping □Fanning □Coning		6	0	0	Ô	0	
No Plume Present		7	٥	6	6	0	
Plume Type Zino Plume Present Color Diagram		8	٥	6	6	0	
Water Droplets Present? ☑NO □YES If YES, droplet plume is □Attached □Detached	╽├╴	9					
At what point in the plume was opacity determined?	╟		<u>G</u>	0	6	0	
Top of state	-	10	0	0	0	0	
Background (i.e. blue sky, trees, etc.) Blue Sky's & wite Cluud's Background Color Sky Conditions Lee wite Clear	-	11					
Background Color Sky Conditions		12					
to broad Mand Hranton		13					
3-5 mph (provide from/to, i.e. from North to South)		14		-	-		
Ambient Temperature of 40 Relative Humidity % 15		15					
°F 4C % 15 Additional Comments/Information:		16					
Fael Oil test		17			 		
1 del or les		18					
	 	19					
Stack SOURCE LAYOUT SKETCH	-				4.		
with O Plume Draw Arrow in		20	ta O				
Sun Point North Direction	Average 10-Minute Opacity Range of Opacity Readings Min. Max						Deacity Readings MaxA
$W_{\text{ind}} \rightarrow \begin{pmatrix} X \\ X \end{pmatrix}$	OBSERVER (please print) Name: Title:						
West East	Signature Date 3-6-07						
							3-6-07
	ł	server Organ	izatiői			1	
OBSERVER'S POSITION	Car	tified by					
140°		THE SY				Į.	ertification Date
SUN LOCATION LINE	شک	717					5-01-07

	<u>A</u>
ن	Los Alamos
	C. 110 Nov A 57 RA 11 Nov.

	Source Name:	Observation Date				Start	(imp-07	End Time
	Power Plant at TA-3 Boiler#2	4	3-6-0	7		16.	'Yog 07 ' 59A	End Time 27
	Source Location:		Sec					, , ,
	TA-3-22 Type of Source Type of Control Equipment	-	Min	0	15	30	45	Comments
	Fuel oil (Boyler) No Particulate Control		1	0	<u>0</u>	0	0	
	Describe Emission Point (Top of stack, etc.)	11	2	0	0	0	G	
	West Glacks Height Above Ground Level Height Relative to Observer	$\ \ $	3	0	8	Ò	0	
	Feet [50] Feet 70		4	0	0	Ö		
	Feet 50 Distance From Observer Feet Feet Figure 4 Feet Figure 4 Feet Figure 4 Figure 4 Figure 4 Feet Figure 4 Figure 5 Figure 5 Figure 6 Figure 6 Figure 6 Figure 6 Figure 6 Figure 7 Fig		5	B	0	٥	6	
	Description of Prime (stack exit only)	┨	6	0	8	0	<u> </u>	
	□Lofting □Trapping □Looping □Fanning □Coning □No Plume Present		7	0		6	6	· · · · · · · · · · · · · · · · · · ·
S)	Emission Color Plume Type No Plume Present Continuous Fugitive Untermittent		8	0	8	0	$\frac{\circ}{\circ}$	
	Water Droplets Present? ☑NO □YES If YES, droplet plume is □Attached □Detached		9	<u>υ</u>	0		0	
	At what point in the plume was opacity determined?	┨╏	10	0	0	0	0	,,
	Top of Stack Describe Background (i.e. blue sky, trees, etc.)	 	11				$\stackrel{\smile}{-}$	
			12					
	Background Color Sky Conditions Yor & Wite Wind Direction		13					
	ind Speed Wind Direction (provide from/to i.e. from North to South)	$\ \cdot\ $	14					
	the from SE	-	15					
	Ambient Temperature °F 40 Relative Humidity % (5	$\ \cdot\ $	16					
	Additional Comments/Information:	╽┠						
ł	Fuel Oil test	-	17					
İ		-	18					
			19					
	Stack with Draw Arrow in	L	20					
I	Emission North Direction		Average 10-Mi	nute O	pacity		ange of fin.	Opacity Readings Max.
	Sun Point		ODCEDIANO	$\mathcal{O}_{\overline{1}}$:		0	<u> </u>
	$\underbrace{\text{Wind}}$		OBSERVER (p Name;	nease p	лги пт) 	÷ -	Title: /	Resafor
	west East	-	Signature	Mi	Mel	/w		Date Date
		1	Signature //		4		~	
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	to	Observer Organ	nizatio	n			3-6-07
ļ	ODGERN/PRIG ROCKEROV	L	KSL	······································	**************************************	***************************************		
	OBSERVER'S POSITION	1	Certified by				(Certification Date
	140°		EfA					3-1-07
1	SUN LOCATION LINE							



Source Name:					Time	End Time	
Power Plant at TA-3	3-20	3-20-0> 10:3			. 35 m	a 10:05 Da	
TA-3-22	Sec Min	0	15	30			
Type of Source Tipe Type of Control Equipment		1	1	1	45	Comments	
Type of Source Type of Control Equipment No Particulate Control		10	10	0	0		
Describe Emission Point (Top of stack, etc.)	2	0	0	0	O		
East Stach If above Stach Height Above Ground Level Height Relative to Observer	3	0	0	0	0		
Feet 156 Feet 170 Distance From Observer Direction of Source From Observer	4	Q	0	0	0		
Flywdy Feet SENN H-1/-07	5	O	Ø	0	O		
□ Lofting □ Trapping □ Looping □ Fanning □ Coning	6	0	0	٥	0		
Mo Plume Present Emission Color Plume Type Mo Plume Present	7	0	Ó	Ó	ð	And the state of t	
Black Discontinuous	8	ర	0	ß	0		
☑NO □YES If YES, droplet plume is □Attached □Detached	9	д	Ø	0	0		
At what point in the plume was opacity determined?	10	0	0	0	0	· · · · · · · · · · · · · · · · · · ·	
Describe Background (i.e. blue sky, trees, etc.)	11		Ÿ				
Background Color Sky Conditions	12						
nd Speed Wind Direction	13						
mph (provide from/to, i.e. from North to South)	14						
Ambient Temperature Relative Humidity	15		<u> </u>		 -		
° 53	16						
Additional Comments/Information Lul Dil Lust	17					***************************************	
Jul Val 1 2001	18						
	19			_			
Stack with SOURCE LAYOUT SKETCH	20	-					
Plume Draw Arrow in	Average 10-Mi	nute Or	pacity	Ra	nge of	Opacity Readings	
Sun Direction Point North Direction	0	•	•	М	in.	Max.	
Wind \longrightarrow X	OBSERVER (please print)						
O TEART	Name: Title: Pearlo						
	Signature Date						
	Observer Organization						
OBSERVER'S POSITION	Certified by	······································			С	ertification Date	
140°	EHA				- American de la companya de la comp	3-1-07-	
SUN/LOCATION LINE			·····	***			

ENV-EAQ-307, R3, ATTACHMENT 3 (OPACITY DETERMINATION AND EXCESS EMISSIONS REPORTING)



Source Name:		Observation Date			PA	Time		
Power Plant at TA-3	- 1	3-50-07			l l		End Time	
ource Location:		1 0 60	37		10	:45	4.10:554	
•		Sec			1	 		
TA-3-22		Min	0	15	30	45	Comments	
Type of Source Type of Control Equipment		1	<u> </u>					
Fuel pil (Boile#3) No Particulate Contro		<u> </u>	0	0	0	0		
Describe Emission Point (Top of stack, etc.)	_	2	0	1	0	0	-	
Height Above Ground Level Height Relative to Observer	- 1	ļ	$+$ $\stackrel{\circ}{-}$	19	$\perp \mathcal{Q}$	ļ		
Height Above Ground Level Height Relative to Observer		3	$\left(\right)$	10	10	0		
Feet 15% Feet 17	.				1	·		
1		4	10	10	10	0		
Fl. , Feet Discussion of Source From Observer		5	Δ	a				
(Years) - JL N 1 4-11-27		3	0	0	0	0		
Description of Plume (stack exit only)		6	C	0	0	0		
□Lofting □Trapping □Looping □Fanning □Coning □No Plume Present			$+$ $\stackrel{\checkmark}{-}$	1				
Emission Cologo Plume Type Plume Present		7	0	0	0	0		
Huch Clear Continuous Fugitive Intermittent				 		 		
Water Droplets Present?		8	0	0	U	0		
ØNO □YES If YES, droplet plume is □Attached □Detached		9						
			10	0	0	0		
At what point in the plume was opacity determined?		10	10	0	۵	0		
10P of Stalk			+			\hookrightarrow		
Describe Background (i.e. blue sky, trees, etc.)		11						
Blueskys		12					· · · · · · · · · · · · · · · · · · ·	
Background Color Sky Conditions	1	1.4						
Blue 5k3 S Background Color Sky Conditions Slue and Speed Wind Direction		13				1		
mph (provide from/to, i.e. from North to South)		1 2						
6-10 M/1)884 15 M2		14				ł		
Ambient Temperature Relative Humidity % 26		15				***************************************		
°F53 % 2C	11-		 					
Additional Comments/Information:	-41	16		l	1			
		1 ~						
trul o il Tent		17						
		18					· · · · · · · · · · · · · · · · · · ·	
	⊿	19	l		1			
Stack SOURCE LAYOUT SKETCH		20			-			
Plume Draw Arrow in	\parallel				- 1			
Emission North Direction		Average 10-Minute Opacity Range of Opacity Read						
Sun Point		Min						
	11-	Deep ven	.1		Щ.,		Max. O	
Wind		DBSERVER (p Name:	nease p	rint)		mid -	01	
West Best	Name: Title: Apoale							
West Best	Is	ignature		1// 2		l r	Pate	
					,;;	1	1	
		2				- 3	5-20-07	
	10	bserver Organ	nization					
		KSL					**************************************	
OBSERVER'S POSITION	1	ertified by	····					
140°	11	•					ertification Date	
	11 1	5+14					3-1-07	
SUN LOCATION LINE	1							



Source Name:							End Time
Power Plant at TA-3		5-20-	07	-	10	:5 5 Ja	\$:05 An
Jurce Location: TA-3-22		Sec Min	0	15	30	45	Comments
Type of Control Equipment	-		6	<u> </u>			Comments
Fuel of 1 Boiler #3 No Particulate Control		1	0	0	0	٥	
Describe Emission Point (Top of stack, etc.)		2	0	0	0	0	
Height Above Ground Level Height Relative to Observer	-	3	0	a	0	0	
Feet 156 Feet 126		4	0	0	()	à	
Distance From Observer Direction of Source From Observer		5	0	Ū	0	0	
Plycols Feet S=NSN N4-11-87 Description of Plume (stack exit only)	-	6	0	0	0	0	
□Lofting □Trapping □Looping □Fanning □Coning				<u> </u>		V	
Emission Color Continuous	11	7	0	0	ð	0	
Mach flow	4	8	g	0	0	6	
Water Droplets Present? ☑NO ☐YES If YES, droplet plume is ☐Attached ☐Detached		9	C	0	0	Ø	
At what point in the plume was opacity determined?	1	10	0	0	0	0	
Describe Background (i.e. blue sky, trees, etc.)	-	11	=,.,.,.,.				
		12					
Blue Sky Shake Sky Conditions Blue Wind Direction		13					
ind Speed Wind Direction mph (provide from/to, i.e. from North to South)							
		14					
6-10 Awest to East Ambient Temperature °F53 Relative Humidity % 25		15					
	41	16					
Additional comments/Information:		17					
I have a final		18					
	▋	19					
Stack SOURCE LAYOUT SKETCH	7 I	20					
with O Draw Arrow in Plume North Direction	11	Average 10-M	inute ()pacity			Opacity Readings
Sun Point North Direction	Ш	()			1	Ain.	Max.
$W_{\text{ind}} \longrightarrow X$	OBSERVER (please print)						
T Post	Name: / Title: Of wal Signature Date						
wisd et							
	Je 1 3-20-07						3-20-07
		Observer Orga	inizatio	on			
OBSERVER'S POSITION		Certified by					Certification Date
140°		ETH				***************************************	3-1-07
SUN LOCATION LINE	"				····		



Source Name:	1 3	Observation Date				End Time	
Power Plant at TA-3] 3-27	3-27-07			521	1m 10:02A	
ource Location: TA-3-22	Sec Min	0	15	30	45	Comments	
Type of Source Type of Control Equipment	1	0	6	2	0	Commens	
Describe Emission Point (Top of stack, etc.)	2	 	 	 		1	
		20	35	1	30		
West Stach 1ft above Stack Height Above Ground Level Height Relative to Observer	3	ZG	10	6	0		
Feet ISO Feet IDO Distance From Observer Direction of Source/From Observer	4		0	٥	0		
Distance From Observer H yeards Feet SENW V-11-17	5	0	٥	O	O		
Description of Plume (stack exit only)	6	3	Ö	6	0		
☐No Plume Present	7	8	0	6	0	· · · · · · · · · · · · · · · · · · ·	
Blach Plume Type	8	G	0	0	9		
Water Droplets Present? ☑NO □YES If YES, droplet plume is □Attached □Detached	9		0	····		······· (
At what point in the plune was opacity determined?	10	0		6	0		
Too of Stach	<u> </u>	0	0	0	<u></u>		
Describe Background (i.e. blue sky, trees, etc.)	11						
Blue Sky's & Stratusel. Background Color Sky Conditions Blue Stratusel	12						
Wind Speed Wind Direction	13						
mph (provide from/to, i.e. from North in South) 5-10 South east 4-11-07	14						
Ambient Temperature Relative Humidity	15				***************************************		
of 48.2 % 54	16						
Additional Comments/Information:	17						
	18		<u> </u>		<u> </u> -	WELL	
	19	1	<u> </u>				
Stack with SOURCE LAYOUT SKETCH	20			1			
Plume Draw Arrow in	Average 10-Mi	nute O _l	pacity	R	ange of	Opacity Readings	
Sun Point Point North Direction	3.5 Min. Max. 30 OBSERVER (please print) Name: Title: Offendar Licas M. Miller						
Wind -							
East							
	Signature			_	I	Date	
	Lucy M	292			18	3-27-07	
	Observer Organ	nzation	i				
OBSERVER'S POSITION	Certified by		· · · · · · · · · · · · · · · · · · ·		(Certification Date	
140°	ETA					3-1-07	
SUNTOCATION LINE						, , – ,	

Source Name:	Observation Da			Start	Γime	End Time	
Power Plant at TA-3	3-77-0	7_		10	COLA	a 10 cram	
ource Location: TA-3-22	Sec Min	0	15	30	45	Comments	
Type of Source Type of Control Equipment	1	0	0	0	0		
Describe Emission Point (Top of stack, etc.)	2	6	0	0	0		
Describe Emission Point (10p of stack, etc.)	3						
Height Above Ground Level Height Relative to Observer Feet 156 Feet 176		0	0	0	0		
Distance From Observer Direction of Source From Observer	4	0	0	0	0		
71 yards Feet Stru 94-11-07	5	0	O	0	0		
Description of Plume (stack exit only) □Lofting □Trapping □Looping □Fanning □Coning	6	0	٥	٥	0		
No Plume Present Emission Color Plume Type Tho Plume Present	7	0	0	0	0		
Black Class Continuous Fugitive Intermittent	8	0	Ò	0	0		
Water Droplets Present? ■NO □YES If YES, droplet plume is □Attached □Detached	9	0	0	Ô	C		
At what point in the plume was opacity determined?	10	0	٥	0	0		
Describe Background (i.e. blue sky, trees, etc.)	11						
Rue Clar & Coholos	12						
Background Color Sky Conditions Scanned	13						
Wind Speed Wind Direction	14					14.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	
mph (provide from/to, i.e. from North to South) 5-16 Southers	15						
Ambient Temperature Relative Humidity % 5 4	16						
Additional Comments/Information:	1.7						
faul Did Test	18						
Y I	19					<u></u>	
Stack SOURCE LAYOUT SKETCH	20						
with Q Draw Arrow in	Average 10-M	inute ()nacity	 F	lange of	Opacity Readings	
Plume Emission North Direction	_	 Э	puesty	b	Ain.	Max	
Sun \bigoplus Point \bigotimes \bigotimes \bigotimes \bigotimes \bigotimes \bigotimes \bigotimes \bigotimes \bigotimes \bigotimes	OBSERVER (-	print)				
Wind A Way	Name: Title: Ofwarder						
	Signature					Date	
	5/	L				3-27-07	
	Observer Orga	nizatio	n				
OBSERVER'S POSITION	Certified by					Certification Date	
140°	EtA					3-1-07	
ALDER CONTROLL DUT					1	-	



Source Name:	Observation Da	te		Start		End Time
Power Plant at TA-3	3-27-	07		10	:12Au	- 16:27 M
Surce Location: TA-3-22	Sec Min	0	15	30	45	Comments
Type of Source Type of Control Equipment	1	Ĉ	0	0	0	
Free oi (Boil H) No Particulate Control	2			0	٥	
Describe Emission Point (Top of stack, etc.) WoStStack 1Ft above Stak		0	0			
Height Above Ground Level Height Relative to Observer	3	0	0	0	G	
Feet 176	4	0	0	0	0	
Distance From Observer Feet Direction of Source From Observer	5	0	٥	\cap	٥	
Plyand Feet SENW 4-11-97 Description of Plume (stack exit only)	6	٥	0	0	0	
□Lofting □Trapping □Looping □Fanning □Coning						
ZiNo Plume Present Emission Color Plume Type ZiNo Plume Present	7	0	0	0	0	
black Continuous Fugitive Intermittent	8	0	0	Ø	5	
Water Droplets Present? ✓NO □YES If YES, droplet plume is □Attached □Detached	9	5	5	5	Ô	
At what point in the plume was opacity determined?	10	0	۵	0	Ò	
Topof State Describe Background (i.e. blue sky, trees, etc.)	11					
Plans Chi & Schahard	12	-				
Blove Sky S Schahrel Background Color Sky Conditions Blove & wifee SCafel						
and Speed Wind Diffection	13					
mph (provide from/to, i.e. from North to South)	14		,			
5-10 Souther 1970 7.27-07	15					
l vv -	16		n.			
Additional Comments/Information:	17					
Sul Oil Tul						
	18					
	19				_	
Stack SOURCE LAYOUT SKETCH	20) 1000			
with O Draw Arrow in Plume North Direction	Average 10-M	inute (Opacity			Opacity Readings
Sun Point Point	600	.5		Į F	Min. O	Max. S
Wind - Xu-8t	OBSERVER (please	print)		TT: 1 00	0 - 10
	Name: Title: Of sold					
TECST	Signature	-			I	Date
	95/01	0 /	16	—		3-27-07
	Observer Org	anizati	on			
· T	KSL					
OBSERVER'S POSITION	Certified by				(Certification Date
140°	EtA					3-1-07
SUN LOCATION LINE						

Source Name:	Observation Da	te		Start		End Time
Power Plant at TA-3	3-27-0	7		/6:	22 Au	1013200
ource Location:	Sec	٥	3.5	20	45	Comments
TA-3-22 Type of Source Type of Control Equipment	Min	0	15	30		Comments
Type of Source Type of Control Equipment No Particulate Control	1	0	٥	0	ð	
Describe Emission Point (Top of stack, etc.)	2	C	٥	0	0	
WeSt State 15+ about State Height Above Ground Level Height Relative to Observer	3	0	0	0	0	
Height Above Ground Level Height Relative to Observer Feet 156 Feet 156	4	0	0	0	0	
Distance From Observer Direction of Source From Observer	5		ß	0		
Track 50 NW 4-11-87		0			0	
Description of Plume (stack exit only) □Lofting □Trapping □Looping □Fanning □Coning	6	0	в	O	0_	
ZiNo Plume Present Emission Color Plume Type Divide Present	7	0	6	ව	6	
Emission Color Plume Type No Plume Present Continuous Fugitive Intermittent	8	O	0	0	0	
Water Droplets Present? □NO □YES If YES, droplet plume is □Attached □Detached	9	٥	a	0	6	
At what point in the plume was opacity determined?	10	0	0	0	0	
Describe Background (i.e. blue sky, trees, etc.)	11					·
Plue & Scahard	12					
Background Color . Sky Conditions						
Vind Speed Wind Direction	13					
mph (provide from/10, i.e. from North to South) 5-10 South Death There is the 3-23-07	14					
A Line Townserture Relative Humidity	15					
*F U8.7 %57	16					
Additional Comments/Information:	17					
ful out 1 and	18					
	19					
Stack with SOURCE LAYOUT SKETCH	20					
Plume Emission North Direction	Average 10-M	imute (-	/]]	Min. 0	Opacity Readings Max.O
Wind - Point East	OBSERVER (Name:	-			Title: 6	pache
	Signature		1			Date 27 - 2
l , R\/	Zee	_{				3-27-07
	Observer Org	anizati	on			
OBSERVER'S POSITION	Certified by Certification Dat					
140°	ETA					3-1-07
SUN LOCATION LINE						



Source Name:						End Time	
Power Plant at TA-3	_	3-27-	マブ		0).	32	10:42
Arce Location: TA-3-22		Sec Min	0	15	30	45	Comments
Type of Source Type of Control Equipment	1	1	0	B	0	ਹ	
Describe Emission Point (Top of stack, etc.)	\dashv	2	0	0	0	0	
Height Above Ground Level Height Relative to Observer	_	3	0	0	0	0	
Height Above Ground Level Height Relative to Observer Feet 176	l	4	0	3	<u>a</u>	a	
Distance From Observer Direction of Source From Observer		5	0	0	0	0	
7(yack Feet See NW 4-11-07	4						
Description of Plume (stack exit only) □Lofting □Trapping □Looping □Fanning □Coning		6	0	0	0	0	
Emission Color Porne Type ZNo Plume Present Black Limits and Continuous Fugitive Continuous	1	7	0	0	0	0	
Water Droplets Present?	-	8		0	0	0	
ØNO □YES If YES, droplet plume is □Attached □Detached		9	0	0	0	O	
At what point in the plume was opacity determined?		10	٥	6	ပ	0	
Describe Background (i.e. blue sky, trees, etc.)	1	11	-				
Blue are Scatud Background Color Sky Conditions Scatral	-	12					
Blue a wife Scatral	4	13					
'ind Speed Wind Direction (provide from (to, i.e. from North to South)		14					
Ambient Temperature Relative Humidity	_	15					
°F 44.2 % 5 9		16					
Additional Comments/Information:		17					
Additional Comments/Information:		18					
		19					
Stack SOURCE LAYOUT SKETCH	1	20			,		
with O Plume Draw Arrow in North Direction Sun Point 4		Average 10-M		Dpacity O		Range o	f Opacity Readings Max. a
Wind -		OBSERVER (Name:	please	print)		Title:	okust
I Pleast		Signature Bate 3-27-					Date 8-27-02
		Observer Orga	anizati	on			
OBSERVER'S POSITION		Certified by					Certification Date
140°		tth					3-1-07
SUN LOCATION LINE							



The World's Committed Schools Reversible Asserted Source Name:	Observation De	te _	<i>A</i> lo	Start	Time	End Time
Power Plant at TA-3	327	10)	M2	10	-42H.	* 10:52 A ==
Surce Location: TA-3-22	Sec Min	0	15	30	. 45	Comments
Type of Source Type of Control Equipment	1	0	O	0	0	
Gueloil Choils#1 No Particulate Control	2		a	J	8	
Describe Emission Point (Top of stack, etc.)	3	0	<u>ا</u>	0	0	
Height Above Ground Level Feet (50 Height Relative to Observer Feet 170				0		
Distance From Observer Direction of Source From Observer	4	0	0		0	
7(500d Feet Se NA) 4-11-17	5	0	0	<u>a</u>	0	
Description of Plume (stack exit only) □Lofting □Trapping □Looping □Fanning □Coning	6	0	0	\mathcal{O}	0	
ZNo Plume Present Emission Color De Plume Type	7	0	0	٥	0	
Black (Less Continuous Fugitive Intermittent	8	0	0	0	0	
Water Droplets Present? ☐NO ☐YES If YES, droplet plume is ☐Attached ☐Detached	9	0	O	0	0	
At what point in the plume was opacity determined?	10	0	0	Ø	0	
Describe Background (i.e. blue sky, trees, etc.)	11					
Blowshis & Schland	12					
Background Color · Sky Conditions Blue a wife Scutod	13					
/ind Speed Wind Direction mph (provide from/to, i.e. from North to South)	14					
5.00 Sout scat 3-27-07	15					
Ambient Temperature Relative Humidity % 5 4	16					
Additional Comments/Information:					-	
Additional Comments/Information: Fuel O Vest	17					
	18	-	ļ	***************************************		
	19					
Stack with O SOURCE LAYOUT SKETCH	20			4-1		
Plurne Draw Arrow in North Direction Emission	Average 10-N	Inute (Opacity		Min. O	f Opacity Readings Max. O
Sun \bigoplus Point X Wind \longrightarrow X X	OBSERVER	(please	print)		Title	Ofeste
wind — Kady	Name: Luco	o l	1. M	illes	* 1110.	
	Signature Date					
	Observer Org	7971724	ion			3-770>
	Lesserver Org	Samzar	iOII			
OBSERVER'S POSITION	Certified by				Ĭ	Certification Date
140°	ETA					3.1-07
SUN LOCATION LINE						



Source Name:	Observation Da			Start		End Time
Power Plant at TA-3	3-27-	· 7-		70.	کیج	1/202
Jurce Location: TA-3-22	Sec Min	0	15	30	45	Comments
Type of Source Type of Control Equipment	1	0	0	0	0	
C. Lail Boils #1 No Particulate Control				<u> </u>		
Describe Emission Point (Top of stack, etc.)	2	۵	<u>a</u>	0	Q	
WeSt State IF + above State Height Above Ground Level 50 Height Relative to Observer Feet 170	3	0	O	0	Ø	
	4	d	a	0	0	
Distance From Observer Direction of Source From Observer	5	0	0	A	0	
Description of Plume (stack exit only)	6	0	0	0	0	
□Lofting □Trapping □Looping □Fanning □Coning □No Plume Present	7	0	ď	O	0	
Emission Colors Plume Type INo Plume Present	8	0	0	8	0	
Water Depolate Present?	9	0			0	
ZINO DYES If YES, droplet plume is DAttached Detached	10		0	0	h	
At what point in the plume was opacity determined?		B	0	8	<u> </u>	
Describe Background (i.e. blue sky, trees, etc.) Rive 5hrs Scot C Background Color Sky Conditions Survey Conditions Wind Speed Wind Direction	11	<u> </u>				
Background Color Sky Conditions	12			ļ	<u> </u>	
	13			<u> </u>		
mph (provide from/togie, from North to South)	14					
Ambient Temperature Relative Humidity % 54	15					
	16				***************************************	
Additional Comments/Information:	17					
Tuel Out 1 de	18					
	19			ļ	-	
Stack SOURCE LAYOUT SKETCH	20				1	
with O Plume Draw Arrow in North Direction Sun Point	Average 10-M	finute (Dpacity O		Range of	of Opacity Readings Max. A
Wind - Sim O East ()	OBSERVER Name:		print) 1. L	e A s.	Title:	gheta
	Signature	e Ce				3-27-07
	Observer Org	anizati	on			
OBSERVER'S POSITION	Certified by					Certification Date
140°	ETA					3-1-07
SUBJECCATION UNIF						



Source Name:	Observation Da	ate		Start 7	Time	End Time	
Power Pl	4-10-07			8:00	a.m.	8:10 a.m.	
Source Location: TA	Sec Min	0	15	30	45	Comments	
Type of Source	Type of Control Equipment	1	0	0	0	0	
Boiler # 2	No Particulate Control	↓	0	0	0	0	
Describe Emission Point (Top o Top of West Boiler St	r stack, etc.) ack	3	0	0	0	0	
Height Above Ground Level	Height Relative to Observer		0	0	0	0	
Distance From Observer	Direction of Source From Observer	1 - 4	0	0	0	0	
73 Yards	NW	5	0	0	0	0	
Description of Plume (stack exit ☐Lofting ☐Trapping ☐Loo	only) ping □Fanning □Coning	6	0	0	0	0	
Emission Color Plume		1 7		ļ	-		
Clear Cont	inuous	8	0	0	0	0	
Water Droplets Present? DENO DYES If YES, droplet p	lume is Attached Detached	9	0	0	0	0	
At what point in the plume was 1 Ft. above top of sta	opacity determined?	10	0	0	0	0	
Describe Background (i.e. blue	ky, trees, etc.)	- 11					
Cloudy		12					
Background Color Grey	Sky Conditions Cloudy	13					
ma opour	Direction e from/to, i.e. from North to South)	14				- 386	
13 mpn (provide	m Southeast	15					
Ambient Temperature 32.5 °F	Relative Humidity 61 %	15					
Additional Comments/Informati	on:						
Fuel Oil Test Unit tripped - came	back at 8:30 a.m	17					
		18					
		19					
Stack with SOURCE	LAYOUT SKETCH	20					
Plume	Draw Arrow in North Direction Point	Average 10-		Opacit	У	Range Min. C	of Opacity Readings Max. 0%
Wind —	X V	OBSERVER Name: Luc	(pleas	-	<u> </u>	Title	Operator
-	Signature	Date					
		tae			<u></u>		4-10-07
		Observer Or KSL	ganiza	tion			
	OBSERVER'S POSITION	Certified by Certification					Certification Date
	140°	ETA					2-28-07
SUN LO	CATION LINE	5					



Source Name:	Observation Date Start Time					End Time		
Power Plan	4-10-07			8:3	3 a.m.	8:43 a.m.		
Source Location:	Sec							
TA-		Min	0	15	30	45	Comments	
Type of Source Boiler # 2	Type of Control Equipment No Particulate Control	1	0	0	0	0		
Describe Emission Point (Top of s	tack, etc.)	2	0	0	0	0		
Top of West Boiler Stac	ck	3	0	0	0	0		
Height Above Ground Level 152 Feet	Height Relative to Observer 174 Feet	4	0	0	0	0		
Distance From Observer	Direction of Source From Observer		+					
73 Yards	NW	5	0	0	0	0		
Description of Plume (stack exit or	nly) ng □Fanning □Coning	6	0	0	0	0		
Mo Plume Present Emission Color Plume Ty	7	0	0	0	0			
Clear Continu		8	0	0	0	0		
Water Droplets Present? DNO DYES If YES, droplet plur	ne is □Attached □Detached	9	0	0	0	0		
At what point in the plume was opa 1 Ft. above top of stack		10	0	0	0	0		
Describe Background (i.e. blue sky.		- 11						
Cloudy		12				occurrence.		
Background Color Grey	Sky Conditions Cloudy	13						
Wind Speed Wind Dire	ction om/to, i.e. from North to South)							
1 10 " 1 "	Southeast	14						
Ambient Temperature	Relative Humidity	15						
32.5 °F	61 %	16						
Additional Comments/Information: Fuel Oil Test		17				19 140		
Unit tripped - came ba	ck at 8:30 a.m	18						
		19						
Stack SOURCE L	AYOUT SKETCH	20						
with O Plume	Draw Arrow in	Average 10-1	Airute ()nacity) an ca	f Opacity Readings	
Emi:	ssion North Direction	09		расну	N	Ain. 09	Max. 0%	
T	()()	OBSERVER	(please	nrint)	<u> </u>			
Wind ->	X V	X1	as Mill			Title:	Operator	
7	Signature Date					Date		
			D		_	4-10-07		
		Observer Organization KSL					——————————————————————————————————————	
	OBSERVER'S POSITION			Certified by Certification Da				
141	ge >						2-28-07	
~	SOM LINE							



Source Name:	Observation D	ate		Start	Time	End Time	
Power Pla	4-24-07			10:3	38 a.n	n. 10:48 a.m.	
Source Location: TA	Sec			20			
Type of Source	Type of Control Equipment	Min	10	15	30	45	Comments
Boiler # 2	No Particulate Control	1	0	0	0	0	
Describe Emission Point (Top of	stack, etc.)	2	0	0	0	0	
Top of Boiler Stack	I Weight Dalacha and	3	0	0	0	0	
Height Above Ground Level 150 Feet	Height Relative to Observer 175 Feet	4	0	0	0	0	
Distance From Observer	Direction of Source From Observer	5	0	0	0	0	
<i>(</i>)	NW					-	
Description of Plume (stack exit		6	0	0	0	0	
Emission Color Plume T	7	0	0	0	0		
Clear □Contin	8	0	0	0	0	es establishment de la constant de l	
Water Droplets Present? □XNO □YES If YES, droplet pl	9	0	0	0	0		
At what point in the plume was of 1 Ft. above top of stac		10	0	0	0	0	
Describe Background (i.e. blue sk		1					
Cloudy		12					
Background Color Grey	Sky Conditions Cloudy	13					
Wind Speed Wind Di	rection from/to, i.e. from North to South)				i a es Recession		
0-10 ' "	n North to South	14				Sylv. Sylvide	and the second second
Ambient Temperature	Relative Humidity	15					
37.4 °F	64 %	16				- 13 %	
Additional Comments/Information Fuel Oil Test	1:	17					
		18					
		19	1				
with Q	LAYOUT SKETCH	20					
· 1	Draw Arrow in North Direction	Average 10-N		Opacity		Range o Min. 0°	of Opacity Readings Max. 0%
Ψ	('/')	OBSERVER	(please	print)			****
Wind —	\mathbf{x}	Name: Lucas Miller Title: Oper					Operator
	Signature Date						
	1	ee		4		4-24-07	
	Observer Org	ganizati	on				
J.	OBSERVER'S POSITION						Certification Date
	40°						2-28-07
	•	<u>L</u>					
SUN LOCA	ATION LINE						



Source Name:						End Time	
Power Plan	nt at TA-3	4-24-07		1	10:4	8 a.m.	. 10:58 a.m.
ource Location:	Sec Min	0	15	20	15	C	
Type of Source	Type of Control Equipment		-	15	30	45	Comments
Boiler # 2	No Particulate Control	1	0	100	100	100	
Describe Emission Point (Top of s	stack, etc.)	2	50	50	30	10	
Top of Boiler Stack Height Above Ground Level	3	0	0	0	0		
150 Feet	Height Relative to Observer 175 Feet Direction of Source From Observer	4	0	0	0	0	
Distance From Observer 71 Yards	5	0	0	0	0		
Description of Plume (stack exit of ▼Lofting □Trapping □Loopi	6	0	0	0	0		
SNo Plume Present Emission Color Plume Ty	7	0	0	0	0		
Clear/Black/clean Continu		8	0	0	0	0	
Water Droplets Present? □XNO □YES If YES, droplet plu	me is □Attached □Detached	9	0	0	0	0	
At what point in the plume was op. 1 Ft. above top of stack		10	0	0	0	0	
Describe Background (i.e. blue sky		11				av 1-35	
Cloudy		12					
Background Color Grey	Sky Conditions Cloudy	13					
ind Speed Wind Dire		13					
J-10 " "	rom/to, i.e. from North to South) North to South	14					
Ambient Temperature	Relative Humidity	15					
37.4 °F	64 %	16					
Additional Comments/Information: Fuel Oil Test							
ruei Oil Test		17					
		18					
		19					
with Q	AYOUT SKETCH	20					
Plume Em	Draw Arrow in North Direction	Average 10-M	linute C	pacity	F	Range of Vin. 09	Opacity Readings 6 Max. 100%
	oint			4 .			
Wind —	X	OBSERVER (Name: Luca	piease as Mill	• ′		Title:	Operator
	,	Signature				T	Date
			1	/0.		-	#-24-02
	"	Observer Org	anizatio	on on	-		FS E
		KSL					
	OBSERVER'S POSITION	Certified by Certification Date					
	40°	ETA					2-28-07
SINIOCA					·		· · · · · · · · · · · · · · · · · · ·



Source Name:	Observation D	ate		Start	Time	End Time			
Pov	4-24-07			10:5	58 a.n	n. 11:08 a.m.			
Source Location:	Sec		1.0	10					
Type of Source	L Z X	73-22 Type of Control Equipment	Min	0	15	30	45	Comments	
Boiler # 2		No Particulate Control	1	0	0	0	0		
Describe Emission Poi	·-	stack, etc.)	2	0	0	0	0	of a spromer and	
Top of Boiler St		77 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7] 3	0	0	0	0		
Height Above Ground 150	Levei Feet	Height Relative to Observer 175 Feet	4	0	0	0	0		
Distance From Observe	er Yards	Direction of Source From Observer	5	0	0	0	0		
Description of Plume (s □Lofting □Trapping	inly)	6	0	0	0	0			
Emission Color	Plume Ty		7	0	0	0	0		
Clear Continu			8	0	0	0	0		
Water Droplets Present? INO CIYES If YES, droplet plum		me is Attached Detached	9	0	0	0	0		
At what point in the plume was opacity determined? 1 Ft. above top of stack			10	0	0	0	0		
Describe Background (i			11						
Cloudy			12					75.540	
Background Color Grey		Sky Conditions Cloudy	13						
Wind Speed	Wind Dir								
5-10 ^{mph}	· -	from/to, i.e. from North to South) North to South	14						
Ambient Temperature	7.0	Relative Humidity	15		1975 (20) ± 1	general (Second			
37.4 °F		64 %	16						
Additional Comments/I	nformation	•	17						
			18						
			19						
Stack SOI	URCEI	AYOUT SKETCH	20						
with Plume		Draw Arrow in	Average 10-N	l'enste (Annaite	7			
Sun (1)		ission North Direction	0%		эраспу	ę	Min. 0%	of Opacity Readings Max. 0%	
Ψ		X	OBSERVER (please print)						
Wind —	Name: Lucas Miller Title: Opera								
			Signature Date						
						2_0_	> $ $	4-24-07	
,			Observer Org KSL	anizatio	on	***	<u> </u>		
	OBSERVER'S POSITION			Certified by Certification Date					
_	140°				ETA 2-28-07				
	-	TION LINE		·					



Source Name:		Observation I)ate		Start	Time	End Time			
	wer Pla		4-24-07			11:	08 a.r	m. 11:18 a.m.		
Source Location:		Sec Min		T						
Type of Source		3-22 Type of Control Equipment			0	15	30	45	Comments	
Boiler # 2	H.L	No Particulate Control		1	0	0	0	0		
Describe Emission Poil Top of Boiler St		stack, etc.)		2	0	0	0	0		
Height Above Ground		Height Relative to Observer		3	0	0	0	0		
Distance From Observer		Direction of Source From Observer		4	0	0	0	0		
	Yards	NW		5	0	0	0	0		
Description of Plume (s	nly) ng □Fanning □Coning		6	0	0	0	0			
Emission Color Plume Type Stop Plume Present				7	0	0	0	0		
Clear Water Droplets Present	□Continu	ous	_	8	0	0	0	0		
D¥NO □YES IF YES,	droplet plur			9	0	0	0	0		
At what point in the plu 1 Ft. above top				10	0	0	0	0		
Describe Background (i	i.e. blue sky.	, trees, etc.)		11						
Background Color Grey	**	Sky Conditions Cloudy	$\exists L$	12						
Wind Speed	Wind Dire	ction		13						
5-10 ^{mph}		om/to, i.e. from North to South) North to South		14						
Ambient Temperature		Relative Humidity	-	15				8.00 0.2 1.0 mg/s	190190	
Additional Comments/Ir	aformation:	64 %		16						
Fuel Oil Test	mornianou.			17		- 15.45 9				
				18						
				19						
Stack SOL	JRCE LA	AYOUT SKETCH		20	* \$4,0%		1100			
Plume Sun	Emis Poi		Average 10-Minute Opacity Range of Opacity Re						of Opacity Readings % Max. 0%	
Wind —	X			BSERVER (lame: Luca	please p s Mill	-	<u>ー</u> ー つ	Title:	Operator	
	- Andrews	,	Signature Date						Date	
	***************************************	1			4			7	4-24-07	
			Observer Organization KSL							
	OBSERVER'S POSITION				Certified by Certification Date					
	140°				ETA 2-28-07					
St	—									



Source Name:		Observation I				Time	
Power Pla	5-1-07	733 LQ.		ì		End Time	
Source Location:				· 	9:4	8 a.m	9:58 a.m.
	3-22	Sec Min	0	15	30	45	Comments
Type of Source Boiler # 2	Type of Control Equipment	1	0	0	0	0	Comments
Describe Emission Point (Top of s	No Particulate Control	- 2	 	9	 		
Top of Boiler stack		***************************************	0	0	0	5	
Height Above Ground Level 150 Feet	Height Relative to Observer	3	5	0	0	0	
Distance From Observer	200 Feet Direction of Source From Observer	4	0	0	0	0	
75 Yards	NW	5	0	0	0	0	Millionesses a <u>manifolium, manifolium que que p</u> er 19 d'apagement es per des des del minimipilia persegui
Description of Plume (stack exit or Description Trapping Loopin	oly) ng □Fanning □Coning	6	0	0	0	10	interference and a second section of the company of the continuous and the control of the contro
Emission Color Plume Typ		7	10	5	5	0	
black/clear	ous DFugitive Antermittent	8	0	5	5	0	**************************************
NO □YES If YES, droplet plun		9	0	0	0	0	
At what point in the plume was opa 1 ft. above stack	city determined?	10	0	0	0	0	900 (1900 1900 190
Describe Background (i.e. blue sky,	trees, etc.)	11					
Clear skys Background Color blue	Sky Conditions	12					
blue Wind Speed Wind Direct	Sky Conditions clear	13	0.0				
3-5 mph (provide fro	om/to, i.e. from North to South)	14					
From No	orth to South	200					
Ambient Temperature 61	Relative Humidity 51 %	15					
Additional Comments/Information: Boiler #2 Fuel Oil Testing		16					
		17	9 9				
		18					
		19					
with Q	AYOUT SKETCH	20					
Sun Emiss Poin		Average 10-M 1.25%		pacity	R	ange of tin. 0%	Opacity Readings Max. 10%
Wind — X		OBSERVER (I Name: Lucas	olease p 6 Mille	rint) r		Title: C	Operator
		Signature Date					
V	25.0	4				5-602	
		Observer Orga KSL	nization)			
	OBSERVER'S POSITION	Certified by Certification Dat					Certification Date
140°		ETA				2	2-28-07
SUN LOCAT	ON LINE		****				

	Source Name:				Observation Date Start Time End Time					
	Power Plant at TA-3				5-1-07	5 i i.,		4		1
į	Source Location:						·	9:5	8 a.m	. 10:08 a.m.
		TA-			Sec Min	Ü	15	30	45	Comments
	Type of Source		Type of Control Equipment		1	0	0	0		Commens
	Boiler # 2		No Particulate Control			V	U	U	0	
	Describe Emission Po		stack, etc.)	71	2	100	100	100	100	No. of the control of
l	Height Above Ground		Height Relative to Observer	_	3	100	100	50	50	
	150	Feet	200 Feet						30	
f	Distance From Observ	/er	Direction of Source From Observer	-	4	25	20	15	10	
	75	Yards	NW		5	10	10	5	0	
	Description of Plume (Cal. ofting Trappin	(stack exit of	nly) ng □Fanning □Coning	71	6	0	5	25	50	
4	Emission Color	Plume Ty		_	7	20	15	5	0	
	black/clear	□Contint □			8	0	0	0	0	
	Water Droplets Presen ☐NO ☐YES If YES,	t? droplet plur	ne is □Attached □Detached	1	9	0				
ŀ	At what point in the pla			┨┠		0	50 0	25 0	10	- 3
L	1 ft. above stac	k	•		10	U	U	U	0	
Γ	Describe Background (i.e. blue sky	, trees, etc.)	1	- 11					
L	Clear skys			╛	12					
ı	Background Color blue		Sky Conditions clear							
ľ	Wind Speed	Wind Dire			13					
ı	3-5 mph	1	om/to, i.e. from North to South)		14					
-	A 3		orth to South		15	\neg				
	Ambient Temperature 61	1	Relative Humidity 51 %	ŀ	15					
	Additional Comments/I Boiler #2 Fuel C	nformation:	ń	1	16					
	Told by James t	to standt	y - having problems with		17					
	valves.		• .		18					
L					19					
	Stack SOI	URCE L	AYOUT SKETCH	İ						
	with OPlume		Draw Arrow in		20					
	Sun 🕁	Emis Poi	sion North Direction		verage 10-Mir 25%	iute O _I	xacity		ange of in. 0%	Opacity Readings Max. 100%
ALL CHARTS OF THE SAME	Wind —	Σ		To	BSERVER (pl	ease p	rint)	<u>i</u>		
		^	lame: Lucas	Miller		•	Title: (Operator		
	V			S	ignature /	7		and a second of the second		Date
			L	Le Le	1	aykanan a			57-02	
					bserver Organ	ization		***************************************		
	OBSERVER'S POSITION			KSL Certified by Certification D					Certification Date	
	_	140°			•				il.	
			*************		ETA					2-28-07
	9	UN LOCAT	ION LINE							

LOS ALAMOS NATIONAL LABORATORY (LANL) VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name:		Observation I	lote	****	C	Time	End Time
Power Plant at TA-3		5-1-07			i	:32 a.r	1
Source Location:	-3-22	Sec		1 2.00	***************************************		
Type of Source	Type of Control Equipment		0	15	30	45	Comments
Boiler # 2 Describe Emission Point (Top of	No Particulate Control		20	10	5	0	
Top of Boiler stack	stack, etc.)	2	0	0	0	0	
Height Above Ground Level 150 Feet	Height Relative to Observer	3	0	0	0	0	
Distance From Observer	200 Feet Direction of Source From Observer	4	0	0	0	0	
75 Yards	NW	5	0	0	0	0	
Description of Plume (stack exit	oing DFanning DConing	6	0	0	0	0	
Emission Color Plume T		7	0	0	0	0	
black/clear	nuous OFugitive Mintermittent	8	0	0	0	0	
□ NO □YES If YES, droplet pl		9	0	0	0	0	
At what point in the plume was of 1 ft. above stack	pacity determined?	10	0	0	0	0	ektikalahnepropossas kod oleksiegen repundan (sole time in musik prepunda opessie in docksie kun kul
Describe Background (i.e. blue sk	y, trees, etc.)	11					
Clear skys Background Color blue	Sky Conditions	12					
Wind Speed Wind Dia	clear	13					
3-5 mph (provide	from/to, i.e. from North to South)	14					
Ambient Temperature 61	North to South Relative Humidity	15					
	51 %	16					
Additional Comments/Information Boiler #2 Fuel Oil Testii	ng	17		\dashv			
		18					
		19					
Stack SOURCE I	AYOUT SKETCH						
Plume	Draw Arrow in North Direction	20 Average 10-Mi 0.875%		<u>l</u> pacity	R	ange of 0	Opacity Readings % Max. 20%
,	oint (1)	OBSERVER (p				m. O	70 Max. 207
WHILE	X /	Name: Lucas	Mille	rmit) r		Title: O	perator
1/		Signature	***************************************		J. J.	C	Pate
¥		Observer Organ	2/			21.	5-1-07
	ODGO	KSL	alifi	ı			
	OBSERVER'S POSITION	Certified by			······································	С	ertification Date
	100	ETA				2	-28-07
SUNTOCA	TION LINE						

ENV-EAQ-307, R3, ATTACHMENT 3 (OPACITY DETERMINATION AND EXCESS EMISSIONS REPORTING)

Source Name:		Observation D		LANTIA			
Power Pla	nt at TA-3	11	aic		1	Time	End Time
Source Location:	are cut III J	5-1-07			10:	42 a.r	m. 10:52 a.m.
	3-22	Min	0	15	30	45	Comments
Type of Source Boiler # 2	Type of Control Equipment No Particulate Control		0	0	0	0	CAMPENS
Describe Emission Point (Top of s	stack, etc.)	$\frac{1}{2}$	0	0	<u> </u>		
Top of Boiler stack			·		0	0	
Height Above Ground Level 150 Feet	Height Relative to Observer 200 Feet	3	0	0	0	0	
Distance From Observer	Direction of Source From Observer	4	0	0	0	0	
75 Yards	NW	5	0	0	0	0	
Description of Plume (stack exit or □Lofting □Trapping □Loopin □XNo Plume Present	nly) ng □Fanning □Coning	6	0	0	0	0	
Emission Color Plume Ty		7	0	0	0	0	
Clear □Continu Water Droplets Present?	ous DFugitive DIntermittent	8	0	0	0	0	
NO DYES If YES, droplet plun		9	0	0	0	0	
At what point in the plume was opa 1 ft, above stack	city determined?	10	0	0	0	0	Макер на учени на мене предоставления на предоставления на предоставления на предоставления на предоставления на
Describe Background (i.e. blue sky,	trees, etc.)	11					
Clear skys							
Background Color blue	Sky Conditions clear	12					
Wind Speed Wind Direct 3-5 mph (provide from	ction om/to, i.e. from North to South)	13					
	orth to South	14					
Ambient Temperature 61 F	Relative Humidity 51 %	15					
Additional Comments/Information: Boiler #2 Fuel Oil Testing		16					
		17				8.0	
		18					
		19					
with Q	AYOUT SKETCH	20					
Plume	Draw Arrow in North Direction	Average 10-Mi	nute Op	acity	Ra	inge of	Opacity Readings
Sun Poin		0%			M	in. O	% _{Max.} 0%
Wind X		OBSERVER (p Name: Lucas				Title: C	perator
/		Signature					Yata
V		Signature Date 5-/-02					
		Observer Organ	ization	timele (melmen ili tra traticiona an an			
	OBSERVER'S POSITION	KSL Certified by			······································		
140°	<u> </u>					ertification Date	
SUM LOCATE	O	ETA 2-28-07					

Source Name:				TON FOR		IVILIA		***************************************	
Po	ower Pla	nt at TA-3	- 1	Observation D	late		Start	Time	End Time
Source Location:		110 41 171-3		5-1-07			10	:52 a.m	n. 11:02 a.m.
	TA-	3-22		Sec		ALL ALL ALL ALL ALL ALL ALL ALL ALL ALL	-	T	
Type of Source		Type of Control Equipment		Min	0	15	30	45	Comments
Boiler # 2		No Particulate Control		1	0	0	0	0	
Describe Emission Po Top of Boiler s	oint (Top of s	stack, etc.)		2	0	0	0	0	
Height Above Ground				3	1	1	-	-	
150	Feet	Height Relative to Observer 200 Feet		<u></u>	0	0	0	0	
Distance From Observer Direction of Source		Direction of Source From Observer		4	0	0	0	0	
75	Yards	NW		5	0	0	0	0	
Description of Plume Lofting Trappin No Plume Present	(stack exit or ig	nly) ng □Fanning □Coning		6	0	0	0	0	n de de de descriptor de la compansión de la compansión de la compansión de la compansión de la compansión de d
Emission Color Plume Type Typo Plume Present		_	7	0	0	0	0	rage and global policy and an amount of the first feature of the feature of the first feature	
Clear			8	0	0	0	0		
NO □YES If YES, droplet plume is □Attached □Detached				9	0	0	0	0	
At what point in the plume was opacity determined? 1 ft. above stack				10	0	0	0	0	
Describe Background (-	trees, etc.)	_	11			-		
Clear skys	` •	,							
Background Color Sky Conditions Clear				12					
Wind Speed	Wind Speed Wind Direction			13					
3-5 mph		om/to, i.e. from North to South)		14			71		
****		orth to South	1						
Ambient Temperature 61 F]	Relative Humidity 51 %	11	15					
Additional Comments/I Boiler #2 Fuel C	nformation:	•	$\exists 1$	16					
DONC! #2 UEI C	n resung	J		17					
				18		$\top \dagger$			
			JF	19		7			
Stack SOI	URCE LA	AYOUT SKETCH	11	20			+		
Plume		Draw Arrow in		\verage 10-Mir	ute Or	acity	 R₂	inge of O	pacity Readings
Sun \bigoplus	Emiss Poir	The state of the s		0%	F.		M	in. 0%	Max. 0%
Wind —	X	(\mathcal{J}')	1	DBSERVER (pl	ease pr	int)			
	ĺ	l l	lame: Lucas	Miller	•	n n	ritle: Op	perator	
/	S	ignature	1 0	ere ere ere ere ere ere ere ere ere ere	, e ¹ ***	Da	ite		
V		5-1-07						-1-02	
		bserver Organ. KSL	ization	······	***************************************	······································			
		OBSERVER'S POSITION	I	roc ertified by		**************************************		7.~	
140"				*				1	rtification Date
		D		ETA			***************************************	2-	28-07
3	UN LOCATI	UNTINE	ŀ						



Source Name:	Observation Date			Start	Time	End Time	
Power Plant	at TA-3	5-11-	07		8:	357	In 8:454m
TA-3-	-22	Sec Min	0	15	30	45	Comments
Type of Source	Type of Control Equipment	1	0	0	٥	0	<u>(), (, (, , , , , , ,),), (, , , , ,), (, , , , </u>
Boiler#3	No Particulate Control						***************************************
Describe Emission Point (Top of sta	ck, etc.)	2	0	d	d	d	
Height Above Ground Level	OP of Boilw Stack Height Relative to Observer	3	0	d	0	0	
150 Feet	200 Feet	4	6	В	0	6	
	Direction of Source From Observer	5		1	- 1	ļ	
75 years	North west		٥	0	<u>U</u>	25	
Description of Plume (stack exit only	6	25	25	5	0		
□No Plume Present Emission Color Plume Type		7	6	0	0	0	
Black to Clear Continuor		8	D	Ď	٥	0	
Water Droplets Present? ₩ O □YES If YES, droplet plume	e is 🗆 Attached 🗆 Detached	9	0	0	0	٥	
At what point in the plume was opac		10	6	0	0	ח	
Describe Background (i.e. blue sky, t	rees etc)	11					
Rhure Shy's		12					
Background Color Blue Sky S	Sky Conditions Clear						**************************************
nd Speed Wind Direct	tion	13					
1 Jeffer	nt/to, i.e. from North to South)	14					
	South west Relative Humidity	15					
47.3°F	62. %	16					
Additional Comments/Information:	0. 4>	17		·····			
2014 AL 200 80	1100 #5	18					
! !							
		19					Marka Salaman and Salaman and Salaman Salaman Salaman Salaman Salaman Salaman Salaman Salaman Salaman Salaman
Stack SOURCE LA	AYOUT SKETCH	20					
Plume Emiss		Average 10-M	inute (2. 0				f Opacity Readings
Wind Shall	H Stack	OBSERVER (Title:	
25-11-02		Signature	41.	\mathcal{M}_{ℓ}	<u> </u>	4	Mender Date
1		1/	۷			5-11-07	
	Observer Orga	anizati	on.		40.00		
	ASL						
	Certified by					Certification Date	
140		EHA				Adhen forstildeli.	2-28-07



Source Name:	Observation D	late		Start Time		End Time	
Power Pla	nt at TA-3	」 ら-11-0	7		8	450.	- 8:55 Au
Jurce Location:	2.00	Sec	-	***************************************			**************************************
!	-3-22	Min	0	15	30	45	Comments
Type of Source	Type of Control Equipment	1	0	0	0	0	
Bailer#3	No Particulate Control	2	1	1			***************************************
Describe Emission Point (Top of	stack, etc.)	£	10	0	0	0	
Height Above Ground Level	Height Relative to Observer	- 3	5	5	5	0	
150 Feet	200 Feet	4		·	***************************************	6	
Distance From Observer	Direction of Source From Observer		10	0	0	U	
75 years	North west	5	٥	0	0	0	
Description of Plume (stack exit o	nly)	6	9	0	0	O	
■Lofting □Trapping □Loopi □No Plume Present		7	a	0	0	a	
Emission Color Plume Ty			-			 	
Water Droplets Present?		8	5	5	5	5	
NO DYES If YES, droplet plu	me is Attached Detached	9	0	0	0	g	
At what point in the plume was op	acity determined?	10	0	0	Ø	0	
Describe Background (i.e. blue sky	y, trees, etc.)	11			The state of the s		
Blue skys		12					
Background Color Sue Sky C	Sky Conditions Clera	13					
ind Sneed Wind Dir		privaceanism distribution (estatuta elizabetica) estatuta en pita pipitam (estatuta)		~~~~			
		14					
Ambient Temperature	st Sout west Relative Humidity	15			-		
47.3 °F	62 %	16					
Additional Comments/Information		17					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
adding Mare	ful to Buraces	I /					
		18					
		19					
	AYOUT SKETCH	20					
with O Plume	Draw Arrow in	Average 10-M	linute (Inacity	I	l Zano≥ of	Opacity Readings
the small Em	nission Fast North Direction	-				Vin. 6	
Sun + Shock IT P	oint 17 Stach (1)	30000000000000000000000000000000000000	0.87			<i>υ</i> ,	5%
Wind —		OBSERVER (Title: 6	Recutor
		Lucus	M	1/1	/w		
		Signature	- 4	· `		1	Date
1		June 1	4-	_		•	5-11-07
		Observer Org	anizatio	n			
•	OBSERVER'S POSITION	KSL				1 2	
		Certified by				į.	Certification Date
	40	ETH		namen sinistinis	(delenates	į	2-28-07
CINITAC	TION LINE						

4	
 Los Alamos 	

Source Name:	5-11-07 8:55 A 9:05 A.						
Power Plan	tat 1A-3	1 L) <u>}</u>	·	0.	55,	ALY. OS AL
Source Location: TA-3	1-22	Sec Min	0	15	30	45	Comments
Type of Source	Type of Control Equipment		ິບ	<u>ن</u>	***************************************	٥	
Boilec#3	No Particulate Control						
Describe Emission Point (Top of st	ack, etc.)	2	0	0	٥	0	
Height Above Ground Level	Height Relative to Observer	3	0	Ø	0	0	
ISO Feet	200 Feet	4	đ	0	a	0)	
Distance From Observer	Direction of Source From Observer	5	0	0	a	a	
75 years	North west				<u> </u>		
Description of Plume (stack exit on □Lofting □Trapping □Loopin	g □Fanning □Coning	6	0	Ø	0	0	
Emission Color Plume Typ		7	0	0	0	Ø	
Clas Continu		8	G	Ø	0	O	Annual Management of the Control of
Water Droplets Present? ▼NO □YES If YES, droplet plun	ne is 🗆 Attached 🔻 🗆 Detached	9	Ø	0	a	0	
At what point in the plume was opa	10	0	0	0	0	X 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1	
Describe Background (i.e. blue sky.	trees, etc.)	11			Manage Control	And the state of t	
1		12					
Background Color Blue 5 Kg S Wind Speed Wind Dire	Sky Conditions	13					
Wind Speed Wind Dire (provide fi	om to, i.e. from North to South)	14					
Wes	of Southwest	15	1 1 1				Average and the second
Ambient Temperature	Relative Humidity 62 %	16	<u> </u>				
Additional Comments/Information:		1 17			-	- Control of the cont	
		 		<u> </u>	2244144		4
fuel oil Bu	a	18	-		- Control of the Cont		
		19		ļ			
Stack with SOURCE L	AYOUT SKETCH	20			***************************************	AL CANADISTRACTION AND ASSESSMENT ASSESSMENT AND ASSESSMENT ASSESSM	
Plume	Draw Arrow in North Direction pint	Average 10-N	09	6		Range (of Opacity Readings
Wind>		OBSERVER Name:		print)	·// _	Title:	09eratu 5-11-07
		Signature		7"	رب ر		Date
1			H				5-11-07
/	Observer On	ganizat	ion				
	Certified by Certificat						
	ETA					2-28-07	
SUN LOCA							



Serree Name:						End Time		
Power Plan	it at TA-3	5-11-	5-11-07 9:05					
Source Location: TA-3	3-22	Sec Min	0	15	30	45	Comments	
Type of Source	Type of Control Equipment	1	0		0	0		
Boiler #3	No Particulate Control		 	<u>a</u>				
Describe Emission Point (Top of s	tack, etc.)	2	U	0	ď	σ		
15-11-17 above Astruct	Height Relative to Observer	3	0	a	0	Q		
Height Above Ground Level	4	0	Ø	Ø	0			
Distance From Observer	Direction of Source From Observer	***************************************	╁┈ऱ┈			<u> </u>		
75 feet words	North west	5	<u> G</u>	<u> </u>	0	Q_		
Description of Plume (stack exit of	nly)	6	0	0	0	0		
□Lofting □Trapping □Looping ■No Plume Present		7	B	a	а	O		
Emission Color Plume Ty Cher Continu		8	O		0	5		
Water Droplets Present?		9	6	0	0	0	and the graph of the control of the	
NO DYES If YES, droplet plu			1	0	0	0		
At what point in the plume was op	acity determined:	10	O	U			540	
Describe Background (i.e. blue sky	y, trees, etc.)							
Blue Shys		12						
Background Color	Sky Conditions							
Speed Wind Dir	<u> </u>	No. of the last	10.74			6.0	affering needs	
mph (provide	from to, i.e. from North to South)	141						
6.9 W	est South Wast Relative Humidity	h de		7.5	77			
Ambient Temperature	Relative Humidity 62 %	-3-5-19-14	(F. x)				1	
Additional Comments/Information		16						
1		100	ne sin		18.5			
fuel oil #	3 Boiles	18			3.0	130	138.04 W 158	
1000								
		27.19		dia.	35		STATE OF STATE	
	LAYOUT SKETCH	2 320%			4.5		75-2-1808	
with O Plume	Draw Arrow in	Average 10-N	dinute	Opacit	v T	Range	of Opacity Readings	
er John Er	nission Fa32 North Direction		00	15	- 1	Min.	COMAN O	
Sun 4 27 I	Point 5 tuch	OBSERVER	<u> </u>	<u>~</u>			72 0	
Wind —	$X \longrightarrow V$	Name:	(picase	ormi) Id.	j	Title		
	luca	11. 1	411			OResta		
	Signature	,	1/	_		Date		
1		Succes	4	<u>_</u>		\geq	5-11-07	
	Observer Or	ganizat	ion					
	KSL Certified by					Certification Date		
	E+A					2-28-07		
	6	6/57						
SUN LOC	CATION LINE	İ						



ce Name:	Observation Date Start Time					End Time	
Power Plant	at TA-3	5-11-	6 9		9	15A	2 9:25 Ha
Source Location:	20	Sec	T	<u> </u>	ş		
TA-3-2		Min	0	15	30	45	Comments
Type of Source	Type of Control Equipment No Particulate Control	1	0		0	0	
Describe Emission Point (Top of stace		2	0	0	0	6	
TOP OF BOI	4-43 Stack	•	***************************************				Park Windowski, do to a chamber over the era more recommon quantities is sugarable.
Height Above Ground Level H	3	0	6	0	0		
/30	4	0	0	0	0		
75 ye feet	Direction of Source From Observer	5	٥	٥	0	a	
Description of Plume (stack exit only) □Lofting □Trapping □Looping		6	0	0	0	۵	
☑No Plume Present		7	0	٥	ð	C	
Emission Color Plume Type	8	†	8	0	0		
Water Droplets Present?	·		0			 	
TNO DYES If YES, droplet plume		9	0	0	0	0	
At what point in the plume was opacit		10	0	0	Ø	0	
Describe Background (i.e. blue sky, tr	rees, etc.)	e île i					
1 Rhue chas		en interestado			-		
Packground Color SI	ky Conditions Clear	2/2/2					Em 1 . A . C
HILP	Clear	and the second	1.5	1			
and Speed Wind Direction mph (provide from	on poo, i.e. from North to South)	2007 km752=200 5 x 4/4 / 3 2 7 2					
Cor lake	SL / 1	14					
Ambient Temperature Re	St Sout way						Account of the Control of the Contro
Amoient temperature	62 %		-				
Additional Comments/Information:	- 64	16					
Additional Confinency information.		10 (10 mg)	9.5		31 3		
					2 (S) t		
		18		2.0			Grand Control
		1195					
Stack SOURCE LA	YOUT SKETCH	20					tight is the
with U	Draw Arrow in	Average 10-N	install		12 19 19 E	2	
Emissi	ion Each North Direction	Vaciage 10-14	mute (spacity	1		f Opacity Readings Max. 0%
Sun \$ start Poin	i I Start		9%		anamora scaponal	······ C	70 0/0
Wind — X		OBSERVER	please	print)	~~~~		
		Name:	0		lin	Title:	20 6
	Signature		بر ن	41	<u> </u>	Oferest Date	
		A Prince			-	5-11-07	
	Observer Org	anizati	on	***************************************		3-11-07	
	Jes/						
	Certified by	***************************************	***************************************	V-1		Certification Date	
142		EAA					2-28-07
SUN LOCATI							

Power Plant at TA-3									End Time
	rPlan	Rat IA-3			V J		7.	<u> </u>	n 9:35An
Source Location:	TA-3			Min Sec	0	15	30	45	Comments
Type of Source Rock #7		Type of Control Equipment No Particulate Control		1	0	0	B	٥	
	Describe Emission Point (Top of stack, etc.)				0	0	0	٥	
		1 H 3 Stach Height Relative to Observer	_	3	۵	a	n	α	
Height Above Ground Le	vel et	Height Relative to Observer		4	S	ර	0	0	
Distance From Observer Direction of Source From Observer									
75 yall		Not west	4	5	0	0	0	0	
Description of Plume (sta				6	0	0	0	0	
Emission Color Plume Type ZNo Plume Present					0	0	0	٥	
Cher Continuous Fugitive Intermittent				8	0	0	0	0	
Water Droplets Present?		9	0	0	0	0			
At what point in the plum	e was opa	acity determined?		10	0	0	0	0	
Describe Background (i.e.	کے سے دواہ مدالت	trass ato)		es en la com					
Describe Background (i.e.	. olue sky	, necs, eu.)					**	Service.	
Blue SA	<u>er S</u>	Sky Conditions		12					
Bluse		There		1900 \$ 0.00		522	55.85	100	
and Speed	Wind Dir							163 S	AND COLUMN
6.9									
Ambient Temperature		Relative Humidity		• "156-pt			16-77	100	tion of the second
47.3°F		62 %		16.77					
Additional Comments/In	formation		_	1000	1	(P)	175	22.5	eyed da be
				10	F	34.1			2000 Sept.
Livel	oil	Burning on #3 Boil	<u> </u>	18		Section 1	79.7		
		J			-	1.			4040
				149					
Stack SOU	RCE I	LAYOUT SKETCH		0.00				15.52	0.000
with Q Plume		Draw Arrow		Average 10-N	linute	Opacit	v T	Range	of Opacity Readings
	Δ En	ussion Eas 1 North Direction	n.		12	0)	•	Min.	00/ Max. 00/
Sun 🔱 🗡			\mathcal{O}	12_			- / V - / (V)		
Wind - Space		OBSERVER	(please	: print)		Title			
		Name:		U	111/4	I IIIC.	Thrat		
		Signature	¥		c- 11 A	<i>E</i>	Date		
					*		2		5-11-07
		Observer Org	ganizat	ion		***************************************	4		
•		K51	ya qada qada jarah			······································	LONG CARLOS TO A		
1		Certified by					Certification Date		
		140.		Et A					2-28-07
1	SUN LOC	ATION LINE							

S' - Name:		Observation Date Start Time End Time					
	ant at TA-3	5=11.	- ¢ }-		9:	354	8:115 Au
Source Location: TA	-3-22	Min	- 0	15	30	45	Comments
Type of Source	Type of Control Equipment No Particulate Control	1	10	0	G	0	
Boil #3 Describe Emission Point (Top of		$\frac{1}{2}$	۵	3		†	The state of the s
				 	10	0	
Height Above Ground Level	Height Relative to Observer	1 3	0	0	0	0	
15°C Feet	≥∞ Feet	4	0	13	0	0	
Distance From Observer	Direction of Source From Observer Nursh was	5	0	0	0	a	
Description of Plume (stack exit	only)	6	a	d	0	0	
Emission Color Plume T		7	0	0	a	a	
Ofer Contin	V •	8	0	0	0	0	
Water Droplets Present? ■ Water Droplets Present? ■ Water Droplets Present? ■ Water Droplets Present?	ume is Attached Detached	9	٥	0	J	0	
At what point in the plume was o		10	0	0	0	ಲ	
Describe Background (i.e. blue sl	ky, trees, etc.)	:11					
Bue Sky 5		43.3					
Background Color	Sky Conditions Clee w		4-4				Bra Land
Speed Wind Di	rection						
·	from to, i.e. from North to South)	14					
6-9 U	rest sout west			100	L.	SJ CJ	2.7
47.3°F	62 %						A TOTAL CONTRACTOR
Additional Comments/Informatio	n:	A CONTRACT OF THE PARTY OF THE	40.0				Figures de la compa
find oil Barri	y an #3 Boller	. 19		72.5			
, , , , , , , , , , , , , , , , , , , ,), 3	18					
		1975					3
Stack SOURCE	LAYOUT SKETCH		+		,		
with Q	Draw Arrow in						200
Plurne	mission North Direction	Average 10-	Minute (Opacity	1		f Opacity Readings
Sun D Wassi		<u>ر</u> ن	0		<u> </u>	0/0 (Max) 0/0	
Wind -> State	X	OBSERVEI Name:	(please	print)		Title:	
	luca	a el	1	!] _		Bleak	
		Signature		م	~		Date
1		2	کے	<			5-11-07
	Observer O	ganizati	on	,————	<u></u>		
	OBSERVER'S POSITION	Certified by	-	***************************************			Certification Date
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Armar ac	ATION I THE					·····	



" me Name:	Observation Date Start Time End Time							
Pov	ver Plar	nt at TA-3	3-11-07	-		9	YST	~ 9'.55a~
Source Location:			Sec	1	T		1 36	
	TA-3		Min	0	15	30	45	Comments
Type of Source		Type of Control Equipment No Particulate Control	1	0	0	0	6	
Boy 43 Describe Emission Poin	nt (Top of st	<u> </u>	1 2		0	~	<u> </u>	
1			<u> </u>	0	1	0	0	
Height Above Ground	DO(S) Level	#3 5/cc/- Height Relative to Observer	- 3	0	0	0	0	
150	Feet	200 Feet	4	0	0	0	0	
Distance From Observe		Direction of Source From Observer	5	\downarrow_{O}	0	0	Ō	
75 Gard Description of Plume (s	1	World twest			1		\vdash	***************************************
□Lofting □Trapping			6	10	0	0	0	
Emission Color	Plume Typ		7	0	0	0	0	
Chew Continuous D Fugitive DIntermittent		8	0	0	0	0		
Water Droplets Present ŞAO □YES If YES,		ne is 🗆 Attached 🔻 🗆 Detached	9	0	0	b	6	
At what point in the plu			10	6	0	0	0	
Describe Background (i	e Stack					77.ST	por es	S. S. S. S. S. S. S. S. S. S. S. S. S. S
	i.e. blue sky,	, trees, etc.)						
Blue Star C Background Color		Slar Conditions	- 12x or			1000		8-5-9 L#-5-187
Blue Shy		Sky Conditions						tra visit de la companya de la companya de la companya de la companya de la companya de la companya de la comp
1 Speed	Wind Dire	ction	12	2.5				NAC ASSESSED
mph	(provide/fr	on to, i.e. from North to South)	14	18.77			100	
6.9	(1)	est south west						
Ambient Temperature		est South west Relative Humidity	159	3.2		eger (2		
1/23°F		67 [%]	16.5%					6.00
Additional Comments/I	nformation:		SO SO SO	1076-001	e a		0874	25 (A. C. L. L. L. L. L. L. L. L. L. L. L. L. L.
(No Glablized	0 A+ 9:	55 Am or Fuel oil	3.39					
			18			23.0	23.7	Palance experience percent
			2/0			22		
			10.5					
Stack SO	URCE L	AYOUT SKETCH	20	8.5				nga Kabupatèn Sa
with O Plume		Draw Arrow in	Average 10-N	(inuta (
Sun \bigoplus Code	Emi	ssion North Direction	Average 10-iv) P	Cange or Min _	Opacity Readings
Sun 🕁 Glad	T Po	sint East Stack		0%	Ü	•	····· 🛆	10 000
Wind —		X Mach	OBSERVER	(please	print)			
	Name:			11.	Title:	.0./		
		Yanania (Marian)	Signature	<u>S</u>	1. l	411-		Ofwal-
	•		Jighature			2		Date
				_2			•	5-11-07
-	Observer Org	anizatio	on			-		
	RSL Certified by		WWW.	······································		Certification Date		
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		9	EtA			***		2-28-07
	SUN LOCA	TION I INC	l					



Source Name:		1					End Time		
Powe	r Plan	t at TA-3		5-11-07			10	124	10:22 Au
Source Location:	TA-3	_22		Sec	_	1.5	70	4.5	
Type of Source	<u> 1A-3</u>	Type of Control Equipment	-	Min	0	15	30	45	Comments
Boiler#3		No Particulate Control		1	٥	0	0	0	trysskungs diegogy y y y promining a same yn differed mae'r enwir en diedd i 140 in 1910 (100 in 1811 (100 100
Describe Emission Point (Top of sta	ack, etc.)	7	2	0	0	0	0	
Top of Boil Height Above Ground Le	s#	3 Stach		3	٥	0	0	٥	
Height Above Ground Lev	vel et	Height Relative to Observer ZOO Feet		4		<u> </u>			
Distance From Observer		Direction of Source From Observer	-		0	0	0	9	
75 Gard	er	North West		5	0	0	0	0	
Description of Plume (star	ck exit on		-	6	0	0	٥	0	
√ENo Plume Present	lume Typ		_	7	0	0	0	0	
1 ,	Continue			8	0	0	0	۵	di et in de a grego y a genera y a a rente en a a en et e et el a tre en 1 de 2000 de 1 de alabat de la agua g a n e
Water Droplets Present?	oplet plun	ne is 🗆 Attached 🔻 🗅 Detached		9	ō	0	0	0	CONTRACTOR OF CONTRACTOR CONTRACT
At what point in the plum	e was opa	city determined?		10	٥	0	0	۵	
1ft of Stac Describe Background (i.e.	<u> </u>		4						
_ 1		trees, etc.)					44	Z	
Background Color	S T	Sky Conditions	-	12. 7					
Blue Sty S		Sky Conditions				1.00			
I Smood IV	Mind Dera	ction on to, i.e. from North to South)			25				
69	<u>ئ</u>	west south west	ı	14.14			144		
Ambient Temperature		Relative Humidity	-	450		10	1		
4/23°F	1	62 %		建设的		-			
Additional Comments/Inf	ormation:						13,0	2 Kg - 1	
Put De Ne.	m Ba	19 001/5 #3		1 of 1/4 of 1	alese:	40	re a		
Ou Roudy h	(Dem	and in Boils 43 as williams PALBO		18 %					
'				119%					
			=	Constitution of the Consti		100	12.4	1.36	Section of the section of
Stack SOU	RCE L	AYOUT SKETCH		207-	700				
Plume	 .	Draw Arrow in North Direction		Average 10-M	(inute	Opacity			of Opacity Readings
Sun + west		SSIOII		/	3%	,		Min. C	3% Max. Ø%
Speek		oint Shack (1)		OBSERVER (please	print)			
Wind —			1	Name:		* # 3	11	Title:	.0.1
				Lucu Signature	- 6 /	W/1/	14		Ofware Date
1				Jignature	P	<i>-</i>	and the same of th		رمر سسید
				Observer Org				>	5-7/-02
				HEL	anizati	OII			
OBSERVER'S POSITION									Certification Date
		40°		EHA					2-28-07
S	UN LOCA	ATION LINE							

° ∽e Name:	7.1		-	Observation Da	te		Start	Time	End Time
	ver Plai	nt at TA-3	_	5-11-	57		(0:22A		10:32pm
Source Location:	TA-	2 22		Sec		<u> </u>	†		
Type of Source	173	Type of Control Equipment	-	Min	0	15	30	45	Comments
811-43		No Particulate Control		1	0	0	0	0	
Describe Emission Poir	nt (Top of s	tack, etc.)	1	2	0	0	0	0	
10P 6F %	city#	3 Stack		3	$\overline{\wedge}$				
		Height Relative to Observer Zow Feet			0	5	5	5	
Distance From Observe		Direction of Source From Observer	-	4	5	0	0	5	9-7-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-
To want lath west			5	5	5	0	0		
Description of Plume (s	stack exit or	nly)	1	6	٥	0	0	()	et met en skrivet de finale de de met en en en en en en en en en en en en en
□ Lofting □ Trapping □ No Plume Present	g 🗆 Loopii	ng OFanning OConing	l	7			0		
Emission Color	Plume Ty		1	<i>'</i>	0	0		0	
Buch to chear Water Droplets Present		ous		8	0	0	0	0	
NO DYES If YES,	droplet plui	ne is Attached Detached	Ì	9	0	٥	0	0	O M. Marchane v. W. (1970) - September 24 March 2014 (Marchan) - September 24 March 2014 (March 2014) (March
At what point in the plu	•	<u>-</u>	1	10	6	0	()	0	
Describe Background (i	tach	trong ato	4			(4.5)		Per Sa	s.c
Blog 5h	i.e. blue sky	, nees, etc. <i>)</i>							
DackRidnin Com	- 1	Sky Conditions	-						
Blue Skys Clear Speed Wind Direction			2510525	de en				20 36 (200 (100 2	
. Speed mph		rometo, i.e. from North to South)	Ì	Mary to the South				Let 3	
6.9	Wes	South West Relative Humidity							
Ambient Temperature	I			- does			10.0	2.0	and the second second
47.3 °F		6٤ %		16					
Additional Comments/I	ntormation:	et the Du Stabliza		17.	200				
Stor Tours	Done	at fl's time stablizer or Per James on 10:324						3 S. F.	
With wear	ARCING	70:324	,	18		3 (0)	17.6	100	09.5
				419.5		- T			
Stack SOI	URCE L	AYOUT SKETCH		200					7.5
Plume		Draw Arrow in		Average 10-Mi	nute (macity	20104	Cange o	f Opacity Readings
Sun \bigoplus Was		ission North Direction pint T East			. 87	01	3		% Max. 5%
Y Stack	<u>' للم</u> ''	5/2/		OBSERVER (t	7				
Wind —	<u>L</u>			Name: / //r	. S	prum	1	Title:	
			Willy operates						
1				Signature		つ			Date
					ے			_	5-11-07
				Observer Orga	nizatio	n			
OBSERVER'S POSITION				Certified by	***************************************		······································		
		40"	Ш	← 1 M					Certification Date
				<u>E+H</u>	***************************************				2-28-07
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Source Name:			Observation Date			Start	Time	End Time	
Power Pla	nt at TA-3		5/15/07		1324		1334		
Source Location:		71	Sec		T	'-		1 / 0 0 /	
TA-	3-22		Min	0	15	30	45	Comments	
Type of Source	Type of Control Equipment	7/	1					Lit #4	
Boiler # <u>1</u>	No Particulate Control			10	0	0		BURNER	
Describe Emission Point (Top of s		7	2	0	10	0	10		
1 70P of MG	ost west Stack		~						
Height Above Ground Level	Height Relative to Observer	11	3	\cup	0	0	0		
/50 Feet	/50 Feet		4	0	0	0	0		
Distance From Observer Yards	Direction of Source From Observer	7 t	5						
200	NE	┛┞		\cup	0	0	$ \mathcal{Q} $		
Description of Plume (stack exit of All Coffing Trapping Tooping Tooping			6	0	0	0	0		
☐No Plume Present			7	~		$\overline{}$			
Emission Color Plume Ty		\mathbf{I}	· · · · · · · · · · · · · · · · · · ·	1		0	$ \mathcal{Q} $		
Water Droplets Present?		┨┟	8	0	75	100	100		
NO DYES If YES, droplet plus	me is Attached Detached		9	100	25	10	5		
At what point in the plume was ope	acity determined?	11	10	\sim				· · · · · · · · · · · · · · · · · · ·	
one toot	- Above Stack	\mathbf{J}			0	0	$ \mathcal{O} $		
Describe Background (i.e. blue/sky	r. trees, etc.)	\mathbb{L}	11						
Blue 6	Slot Conditions	41	12						
Wind Speed Wind Dire	Sky Conditions NOST/4 Cloudy	11	13						
mph (provide fi	rom/to, i.e. from North to South)		14						
F	om South to North Relative Humidity	IF	1.5						
Ambient Temperature	Relative Humidity %	$\ \cdot\ $	15						
62.5 °F Additional Comments/Information:	73	$\ \cdot \ $	16	-		ļ			
i ,			17						
Boiler to	obe rul	╽├	10						
on Line	To Run Tarbine	$\ \ $	18						
0/0 7/10-		!	19		- interest			*.	
Stack SOURCE L	AYOUT SKETCH		20				:		
Plume	Draw Arrow in		Average 10-Mi	nute O	pacity	R	ange of	Opacity Readings	
Sun $+$ Emi	ission North Direction		10 2	7	0/2	M	fin.	Max.	
	2 "	-	DBSERVER (r	75	70		0.0%	0 109%	
Wind —		Vame:	nease p	orint)			Maint.		
\		\	BRI	An)	()	112	A ILLO	MAN	
_		5	Signature				/	Date /	
			Brian ()						
			Observer Organization S/13/0/						
		1	-						
ORSERVER'S POSITION		Contiford by						Cartification Date	
OBSERVER'S POSITION			Certified by Certification Da						
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Source Name:		٦ [Observation Da	te /		Start	Time	End Time
Power Plan	nt at TA-3		5/13	5/0	7	13	34	1344
Source Location:	3 77		Sec Min	0	15	30	45	Comments
Type of Source	Type of Control Equipment	┨╏	***************************************			30		Commons
Boiler # 1	No Particulate Control		1	\cup	0	\cup	1	
Describe Emission Point (Top of s		11	2	0	0	0	O	
TOP OF MU	ost west Stack		3	0	0	0	0	
Height Above Ground Level	Height Relative to Observer Feet		4	0	0			
Distance From Observer	Direction of Source From Observer	11				0		Lit#2 BURNER
200 Yards	NE	▋▐	5	0	0	0	0	BURNEL
Description of Plume (stack exit or Lofting Trapping Theoping	nly) ng □Fanning □Coning		6	\bigcirc	0	0	0	
□No Plume Present Emission Color		┨┃	7	0	0	0	0	
Black Continu			8	0	0	0	0	
Water Droplets Present? NO □YES If YES, droplet plu	me is □Attached □Detached		9	0	0	0	0	
At what point in the plume was op	acity determined?	11	10	0	75	75	100	
Describe Background (i.e. blugsky	t Aboue Stack	┫╽	11					ANY 25
Blue/6	sey SKY		12					
Background Color 6/24	Sky Conditions 1/4 Cloudy	<u>.</u>	13					
Wind Speed / Wind Dir mph (provide f	ection from/to, i.e. from North to South)		14	,				
FR	om South to North		15	†				A STATE OF THE STA
Ambient Temperature	Relative Humidity %		16	2.19.11				
Additional Comments/Information			17				ŀ	
			18					
		!	19	78 J.				1
Stack with SOURCE I	LAYOUT SKETCH		20					
Plume	Draw Arrow in North Direction	П	Average 10-M	linute (Opacity /		Range o Min.	f Opacity Readings Max.
Sun 🕁	pission			25		1	0.0	% 10,0%
Wind —			OBSERVER (please	print)		Tisla	Maint.
77777			Name:	An)	()Z	1/2	1100:	MAN
\ \ \ \			Signature				Λ I	Date
`			+ 2	care	\mathcal{A}	X		5/15/07
			Observer Org					
	OBSERVER'S POSITION	$\ \cdot\ $	Certified by	<u>K</u> S)			Certification Date
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SINLOC	ATION LINE	1						



Source Name:		Observation D	Observation Date			Time	End Time
Power Plan	nt at TA-3	5//	5/15/01		1344		1354
Source Location:	2 27	Sec		1.5			<i>C</i>
Type of Source	3-22 Type of Control Equipment	Min	0	15	30	45	Comments
Boiler # 1	No Particulate Control	1	5	5	0	0	
Describe Emission Point (Top of s	stack, etc.)	2	0		0	0	
	ost west Stack	3					
Height Above Ground Level	Height Relative to Observer			$\frac{1}{2}$	0		
Distance From Observer	Direction of Source From Observer	4	10	0	0	9	
200 Yards	NE	5	0	0	0	0	
Description of Plume (stack exit of SELofting Trapping Theoping Tooping	nly) ng □Fanning □Coning	6	0	0	0	0	
□No Plume Present		7	0	0	0	0	
Emission Color Plume Ty		8		O	Ö	O	
Water Droplets Present? NO □YES If YES, droplet plu	me is 🗆 Attached 🗆 Detached	9	0	0	0	0	
At what point in the plume was op	acity determined?	10	0	0	0	0	
Describe Background (i.e. blue/sky		11					
	sey Sky	12					
Background Color Buc 6/2 Wind Speed Wind Dir	Sky Conditions 1/4 Cloudy	13					
mph (provide f	from/to, i.e. from North to South)	14					
Ambient Temperature	om South to North	15	. 1				
62.5 °F	45 %	16		,			· · · · · · · · · · · · · · · · · · ·
Additional Comments/Information	:	17					
		18					
		19					
Stack SOURCE I	LAYOUT SKETCH	20	9			-	
with Plume	Draw Arrow in	Average 10-N	finute (Dpacity	F	lange of (Opacity Readings
Ed	nission North Direction		,25	- %	N	1in. 0.0%	Max.
Sun 🕀	out ('\)	OBSERVER				0.0/0	Maint.
Wind —		Name:	(Proceso			Title:	man.
		DRI	AN	U	112	· · · · · · · · · · · · · · · · · · ·	MAN
		Signature		1	1		Date
	Duare (5/15/07						
	Observer Org	ganizatio				, ,	
	Certified by					Certification Date	
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arnico	ATTONUE		······································				
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Source Name:		7	Observation Date / Start Time		End Time				
Power Pla	nt at TA-3		5//3	5/0	7	13	154	1404	
Source Location:		71	Sec	7 -	T	10			
1	3-22	┨┃	Min	0.	15	30	45	Comments	
Type of Source Boiler # 1	Type of Control Equipment No Particulate Control		1	0	0	0	0		
Describe Emission Point (Top of s		┨╽	2		2				
TOP OF ME	st west Stack		-			0	0	<u></u>	
Height Above Ground Level	Height Relative to Observer	1	3	0	0	0	0		
/50 Feet	150 Feet		4	0	\bigcirc	0			
Distance From Observer Yards	Direction of Source From Observer	1	5			0			
	NE	┇┞	<u> </u>		\mathcal{O}	0	$ \mathcal{O} $		
Description of Plume (stack exit of Lofting Trapping Looping			6	0	0	0	0		
Mo Plume Present		\prod	7	0	\bigcirc	\bigcirc			
Emission Color Plume Ty		lŀ	8			~			
Water Droplets Present?		┨┠	······································		\cup	\bigcirc			
NO □YES If YES, droplet plus	me is Attached Detached		9	0	0	\circ	0		
At what point in the plume was op-	acity determined?	11	10	\circ	0	0	\bigcirc		
Describe Background (i.e. blueysky	- Above Stack	┨┞	<u> </u>					Manager Manager, property or produced and account of the second and account of the second and account of the second	
(3)	ley SKU	$\ \cdot\ $							
Background Color	Sky Conditions // 0/		12						
Wind Speed / Wind Dire	Mostly Cloudy		13			***************************************			
17 mph (provide fi	rom/to, i.e. from North to South)		14						
10 K	om South to North	╽┟	15						
Ambient Temperature	Relative Humidity %	$\ \cdot\ $:	
Additional Comments/Information:			16			-			
			17	48494			****		
			18						
			19						
Stock COUNCE I	AVOUT SIZETOU	╎├		di Len					
with Q	AYOUT SKETCH Draw Arrow in	Ŀ	20	68.1			<u> </u>		
Plume	ission North Direction	1	Average 10-M	mute O	pacity		ange of (fin.	Opacity Readings Max.	
Sun 🕀	Sint		٥.	09	6		0.0%		
Wind -			OBSERVER (1	olease p	orint)			naint.	
<u> </u>		'	Name: R	41)	()~	1/2	Title:	MAN	
			Signature	, , , ,	<u></u>	1) [Date /	
			Lynn (& shelps						
			Observer Organization						
			KSL						
OBSERVER'S POSITION			Certified by	<u> </u>			C	Certification Date	
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	θ	L	<i>- ('</i>		······································			2 10 0 7	
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Source Name:	17	Observation J	ate	;	Start	Time	End Time
Power Plant at TA-3		5/15/07		14	100	1 1414	
Source Location:		Sec	-		1 6	T	(
TA-3-22		Min	0	15	30	45	Comments
Type of Source Type of Control Equipment Boiler # 1 No Particulate Control		1	1	0	0	0	
Boiler # 1 No Particulate Control Describe Emission Point (Top of stack, etc.)	┧┢	3		+-	1	+	
TOP OF Most west Stack	$\ \ $	2	$\downarrow O$	10	0	0	
Height Above Ground Level Height Relative to Observer	$\ \ $	3	10			0	
/50 Feet /50 Feet		4					
Distance From Observer Yards Direction of Source From Observer	I	5				1	
DE NE		<u></u>	10	+Q	\cup	10	
Description of Plume (stack exit only) □Lofting □Trapping □Looping □Fanning □Coning		6	0	0	0	0	
Emission Color Plume Type SANO Plume Present		7	0	0	0	\bigcirc	
NONE Continuous Pugitive Continuous		8	0				
Water Droplets Present? NO □YES If YES, droplet plume is □Attached □Detached		9					
At what point in the plume was opacity determined?	\vdash	10					
one foot Above Stack	-		0		\cup	$\langle \mathcal{O} $	· · · · · · · · · · · · · · · · · · ·
Describe Background (i.e. blugsky, trees, etc.)	<u> </u>	11					· · · · · · · · · · · · · · · · · · ·
Background Color Sky Conditions		12				i	
Wind Speed Wind Direction Wind Speed		13					
mph (provide from/to, i.e. from North to South)		14					
Ambient Temperature Relative Humidity	 	15	<u> </u>		, 		
62.5°F 45%	-						
Additional Comments/Information:		16					
		17				ľ	
		18					***************************************
		19	***************************************				-
Stack with SOURCE LAYOUT SKETCH		20					
Plume Draw Arrow in	Av	erage 10-Mi	nute C	pacity	R	ange of	Opacity Readings
Sun Direction North Direction		()	0	/_	M	lin.	Max.
Wind -	OBSERVER (please print) OBSERVER (please print) OBSERVER (please print)						
Wild	Name: Repease print) Name: Repease print) Name: Repease print)						100107.
	ONIAN OLIZ MAN						MAN
	Sig	mature Z	_	n			Date /
<u> </u>	Dian 5/15/07						
	Observer Organization						
	KSL						
OBSERVER'S POSITION	Certified by Certification I					Certification Date	
140°	ETA 3-15-					3-15-07	
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Source Name:			Observation Date			Start	Iime	End Time
Power Pla	nt at TA-3		5/15/07		14	14	1424	
Source Location:			Sec	,	İ			
	3-22	┨╽	Min	0	15	30	45	Comments
Type of Source	Type of Control Equipment No Particulate Control		1	0	0	0	0	environmental de la companya de la c
Boiler # 1 Describe Emission Point (Top of s	*	┩╽	2					-
Describe Emission Point Top of S	ost west Stack				\cup		0	
Height Above Ground Level	Height Relative to Observer	┨┃	3	0	0	0	0	
150 Feet	150 Feet		4					
Distance From Observer	Direction of Source From Observer	11	•					
200 Yards	NE		5	0	0	0	\mathcal{O}	
Description of Plume (stack exit o	nly)	7	6	0	0	0	0	
□Lofting □Trapping □Loopi ZiNo Plume Present	ng □Fanning □Coning		7			<u>~</u>		
Emission Color Plume Ty					()	\mathcal{L}	\mathcal{L}	
NONE Continu	uous 🗆 Fugitive 🗆 Intermittent		8	0		\bigcirc	\bigcirc	
Water Droplets Present? NO □YES If YES, droplet plu	me is Attached Detached		9	0	0	0	0	
At what point in the plume was op	acity determined?		10	\circ		\bigcirc	0	
one tout	t Above Stack	lŀ	11					
Describe Background (i.e. blue sky	y, trees, etc.)							
Background Color	Sky Conditions // \(\rangle \)	$\ \ $	12					
Bue/6/ey Most/yCloudy			13				***************************************	
mph (provide from/to, i.e. from North to South)			14					
10 Fr	om South to North]	15					PARTY - 1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-
Ambient Temperature	Relative Humidity %							
Additional Comments/Information	:	ľ	16					
			17		-			
			18					77
		╟	19					-
		-		is is				-
Stack SOURCE I	LAYOUT SKETCH		20					
Plume	Draw Arrow in North Direction		Average 10-M	inute C	pacity		lange o Iin.	f Opacity Readings Max.
Sun 🕁	nission North Direction		O.	0%	0	12		
Wind -			OBSERVER (please	print)	······································	7	Maint.
441170		Name:	41)	1)	Tio	Title:	MAN	
		 -	Signature	1110			T	Date ,
\			45,5		$A \rightarrow$	\bigcup		5/15/00
			Observer Orga	anizatio				444
			_	K 5				
OBSERVER'S POSITION		┟	Certified by	- <u> </u>				Certification Date
140°			ETI	4				3-15-07
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Source Name:	Observation Date			Start	Time	End Time		
Power Plant at TA-3	5/15	5/0	7	1424		1434		
Source Location: TA-3-22	Sec Min	0.	15	30	45	Comments		
Type of Source Type of Control Equipment	1	0		\wedge	0			
Boiler # 1 No Particulate Control	<u> </u>	<u> </u>						
Describe Emission Point (Top of stack, etc.)	2	0	0	0	\cup			
TOP OF MOST WOST STACK Height Above Ground Level Height Relative to Observer	3	0	0	0	0			
150 Feet 150 Feet	4		0	0	0			
Distance From Observer Direction of Source From Observer	5			^				
200 Yards NE			0	\cup	\mathcal{O}			
Description of Plume (stack exit only) □Lofting □Trapping □Looping □Fanning □Coning	6	0	0	0	0			
Mo Plume Present	7	0	0	0	0			
NONE Continuous Fugitive Continuous	8	0	0	0	0			
Water Droplets Present? NO □YES If YES, droplet plume is □Attached □Detached	9	0	0	0	0			
At what point in the plume was opacity determined?	10	0	0	0	0			
ONE FOOT Aboue Stack Describe Background (i.e. blugsky, trees, etc.)	11							
Blue/Gier Sky	12							
Background Color Sky Conditions // Cloudy	13							
Wind Speed / Wind Direction (provide from/to, i.e. from North to South)	14							
12 From South to North	15	1						
Ambient Temperature Relative Humidity (2, 5 °F 45 %	16	34.1.2	-			f		
Additional Comments/Information:	17					, (
	18							
	19					· v.		
COLIDOR I AVOLTE SUPECH		El as no	<u> </u>					
Stack with SOURCE LAYOUT SKETCH Draw Arrow in	20 Average 10-M	Maria de la Companya	Onegita	<u> </u>	Panas	of Opacity Readings		
Plume Emission North Direction	Average 10-1v	milite (Ораси		Min.	Max.		
Sun + Point	0.0	<u> </u>		(D.09			
Wind -	OBSERVER Name:	(please	print)		Title:	Maint.		
	DRI	An	(A	7/2		MAN		
	Signature	/	$\bigcirc /$)		Date		
	Dian 5/15/07							
	Observer Organization KSL							
OBSERVER'S POSITION	Certified by	Certification Date						
140°	E7	A				3-15-07		
CAN LOCATION LINE								

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•	Los Alamos
	HATIOHAL LABORATORY

Source Name:	Observation Date Start Time			Time	End Time		
Power Plan	5/15/01			1434 1444			
Source Location:	Sec	1/	T	20	1,5	C	
TA-	Type of Control Equipment	Min	0	15	30	45	Comments
Type of Source Boiler # 1	No Particulate Control	1	10	0	0	0	
Describe Emission Point (Top of s		2		0	\bigcirc	0	
Describe Emission Fount (10) of s	st west Stack		12	10		2	
Height Above Ground Level	3	$\bot \bigcirc$	0	0	0		
/50 Feet	Height Relative to Observer /5 Feet	4	0	0	0	0	
Distance From Observer Yards	Direction of Source From Observer	5		0	0	0	
Description of Plume (stack exit or	aly)	6	0			0	
□Lofting □Trapping □Loopin	7	1					
Emission Color Plume Ty	8		0	2	0		
Water Droplets Present?	None Continuous Fugitive Intermittent				\mathcal{O}	\bigcirc	
NO TYES If YES, droplet plus	me is □Attached □Detached	9	0	0	0	0	
At what point in the plume was op-	acity determined?	10	10	0	\bigcirc	\bigcirc	
Describe Background (i.e. blugsky	ONE FOOK Aboue Stack Describe Background (i.e. blugsky, trees, etc.)						
Blue/6.	Sey Sky Sky Conditions 105 t/y Cloudy	12					
Background Color GIEY	13						
Wind Speed Wind Dire	14						
	OM South to North Relative Humidity					,	
	Relative Humidity	15	3.25	:	<u></u>		ļ <u> </u>
Additional Comments/Information	7.5	16					
, , , , , , , , , , , , , , , , , , , ,		17					:
		18					
		19					
	AYOUT SKETCH	20					£ .
with O Plume	Draw Arrow in	Average 10-N	Minute (Opacity	F	Range o	f Opacity Readings
Eth	nission North Direction		0/	/	N	vlin.	Max.
Sun 🔱		OBSERVER	<u>) / (</u>) print)		0.09	44 + 77
Wind —		Name:	(hiease		_	Title:	Maint.
<u> </u>		L BR	IAN	U	1/2		MAN
\	1 /	Signature	•)()	Date
`	\	1 Du	an	$(\bigcirc$			5/15/07
		Observer Or	-	,			1 1
	Certified by C					Certification Date	
	ETA					3-15-07	
	140°			•		<u> </u>	5-10-07
SINTOC	ATION LINE						



Source Name:	Observation Date			Start Time End Time			
Power Plant at TA-3	5/	5/15/07		1444		1454	
Source Location:	Se			•		_	
TA-3-22 Type of Source Type of Control Equipment	Min	0	15	30	45	Comments	
Type of Source Type of Control Equipment Boiler # 1 No Particulate Control	1	0	0	0	0		
Describe Emission Point (Top of stack, etc.)	2	10	0	0	0		
TOP OF MOST West Stack	3		~	0		<u></u>	
Height Above Ground Level Height Relative to Observer Feet Feet	 						
Distance From Observer Direction of Source From Observer	4	10	0	0	0		
200 Yards NE	5	0	0	0	0		
Description of Plume (stack exit only)	6		0	0			
□Lofting □Trapping □Looping □Fanning □Coning →To Plume Present	7	6		1	0		
Emission Color Plume Type 54No Plume Present Continuous	8			0			
Water Droplets Present?			0	0			
NO □YES If YES, droplet plume is □Attached □Detached	9		\mathcal{O}	0	$ \mathcal{O} $		
At what point in the plume was opacity determined? ONE FOOT Above Stack	10	0	0	0	0	······································	
Describe Background (i.e. blue/sky, trees, etc.)	11						
Blue/Gsey Sky	12						
Background Color Sky Conditions 5/4 Cloudy	13						
Wind Speed / Wind Direction / (provide from/to, i.e. from North to South)	14						
1/2 From South to North	 						
Ambient Temperature Relative Humidity %	15						
Additional Comments/Information:	16						
Additional Confidence information.	17						
	18						
	19					·.	
Stack SOURCE LAYOUT SKETCH	20					-	
with Q Draw Arrow in	Average 10	-Minute C	macity	10	ange of	Opacity Readings	
Plume Emission North Direction	/// A	0/	риону	N	Ain.	Max.	
Sun + Point	<i>U.O</i>	70		Ĺ	0.0%	0.090	
Wind -	OBSERVE	K (piease)	print)	_		Maint. Lead	
	[BK	CIAN	(K	7XZ_		MAN	
	Signature						
	17/11	Fund (\$ 5/15/07)					
	Observer Organization						
		<u>K5</u>			······		
OBSERVER'S POSITION	Certified by					Certification Date	
140°	1 E	TA			PETERSON MALANA	3-15-07	
SUN LOCATION LINE							